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BEFORE THE ARIZONA CORPORATION COMMISSION

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MARC SPITZER
Chairman
WILLIAM MUNDELL
Commissioner
JEFF HATCH-MILLER
Commissioner
MIKE GLEASON
Commissioner
KRISTIN MAYES
Commissioner

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IN THE MATTER OF THE PETITION
OF DIECA COMMUNICATIONS, INC.
dba COVAD COMMUNICATIONS
COMPANY FOR ARBITRATION OF AN
INTERCONNECTION AGREEMENT
WITH QWEST CORPORATION.

DOCKET NO. T-03632A-04-0425

T-01051B-04-0425

**NOTICE OF FILING DIRECT
TESTIMONY**

Qwest Corporation files herewith its public/redacted version of Direct Testimony of William R. Easton, Karen A. Stewart and Michael Norman, in the above-captioned matter.

RESPECTFULLY SUBMITTED this 20th day of December, 2004.

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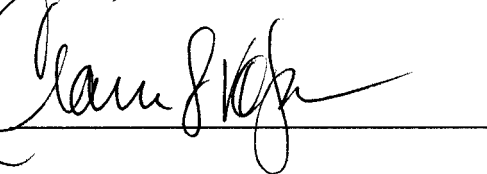
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**WILLIAM R.
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BEFORE THE ARIZONA CORPORATION COMMISSION

MARC SPITZER

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COMPANY FOR ARBITRATION OF AN)	
INTERCONNECTION AGREEMENT)	
WITH QWEST CORPORATION)	

DIRECT TESTIMONY OF WILLIAM R. EASTON

ON BEHALF OF

QWEST CORPORATION

PAYMENT ISSUES

(Disputed Issue Nos. 8-1, 8-2, and 8-3)

DECEMBER 20, 2004

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I. IDENTIFICATION OF WITNESS

Q. PLEASE STATE YOUR NAME, OCCUPATION AND BUSINESS ADDRESS.

A. My name is William R. Easton. My business address is 1600 7th Avenue, Seattle, Washington. I am employed as Director – Wholesale Advocacy. I am testifying on behalf of Qwest Corporation (“Qwest”).

Q. PLEASE GIVE A BRIEF BACKGROUND OF YOUR EDUCATIONAL BACKGROUND AND TELEPHONE COMPANY EXPERIENCE.

A. I graduated from Stanford University in 1975, earning a Bachelor of Arts degree. In 1980, I received a Masters of Business Administration from the University of Washington. In addition, I am a Certified Management Accountant and member of the Institute of Management Accountants.

I began working for Pacific Northwest Bell in 1980, and have held a series of jobs in financial management with U S WEST, and now with Qwest, including staff positions in the Treasury and Network organizations. From 1996 through 1998, I was Director – Capital Recovery. In this role I negotiated depreciation rates with state commissions and the FCC and testified in various regulatory proceedings. From 1998 until 2001 I was a Director of Wholesale Finance, responsible for the management of Wholesale revenue streams from a financial perspective. In this capacity I worked closely with the Product Management organization on their product offerings and projections of revenue. In

1 October of 2001 I moved from Wholesale Finance to the Wholesale Advocacy group,
2 where I am currently responsible for advocacy related to Wholesale products and services.
3 In this role I work extensively with the Product Management, Network and Costing
4 organizations.

5 **Q. HAVE YOU TESTIFIED PREVIOUSLY IN ARIZONA?**

6 A. Yes. I have testified previously in Docket Nos. T-01051B-97-0689, U-3021-96-448, T-
7 02428A-03-0553, T01051B-02-0871 and T-01051B-04-0152.

8
9 **II. PURPOSE OF TESTIMONY**

10 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

11 A. The purpose of my testimony is to explain Qwest's positions, and the policies underlying
12 those positions on Disputed Issue No. 8 - Payment Issues. There are three distinct subparts
13 to this issue in this arbitration proceeding: 8-1 (Due Dates for Amounts Payable); 8-2
14 (Timing for Discontinuing Orders); and 8-3 (Timing for Disconnecting Services).¹ At the
15 time Covad filed its Petition for Arbitration there was a fourth payment issue involving the
16 definition of "repeatedly delinquent", which has since been resolved by the parties.

¹ Covad does not break this disputed issue into separate subparts. I do so here so that the precise language and dispute related to each subpart is identified and addressed.

1 My testimony will show that Qwest's position on these payment issues strikes a
2 commercially reasonable and appropriate balance between meeting the billing and payment
3 needs and concerns of both Covad and Qwest. It will also show that Covad has failed to
4 demonstrate why there should be any deviation from those standards which are generally
5 applicable industry-wide.

6 **Q. IN ITS PETITION FOR ARBITRATION, COVAD CHARACTERIZES ISSUE NO.**
7 **8 AS BEING ABOUT "PROVISIONS RELATED TO BILLING AND BILLING**
8 **DISPUTE RESOLUTION." IS THIS AN ACCURATE DESCRIPTION OF THE**
9 **ISSUE?**

10 A. No. The language in dispute involves separate subsections of Section 5.4 of the
11 interconnection agreement entitled "Payment," which is the section where the parties
12 address issues concerning payment obligations. While Covad has characterized Issue 8 as
13 focusing on "billing" issues, Issue 8 (and Section 5.4 of the agreement) is more
14 appropriately described as "payment" issues: Section 5.4 relates to the obligation of the
15 billed party to make payments and to the billing party's recourse in the event of non-
16 payment.

17 **Q. BY WAY OF BACKGROUND, DOES THE PAYMENT LANGUAGE IN THE**
18 **AGREEMENT APPLY TO BOTH PARTIES?**

19 A. Yes. The language at issue in this interconnection agreement applies to both parties since
20 the agreement anticipates that either party may provide services to the other and be entitled
21 to payment for the services provided. One of the unique aspects of Qwest's relationship

1 with Covad, however, is that Covad does not provide any services to Qwest.
2 Consequently, Covad is likely not concerned about the terms governing payment for
3 services rendered to Qwest. This perhaps explains why Covad is so aggressively seeking
4 to put off the time for paying its bills as well as the time when Qwest can take action to
5 protect itself from further business risk by discontinuing the processing of new orders and
6 disconnecting service. Covad's proposed extended times are at odds with standard and
7 commercially-reasonable practice, and would improperly require Qwest to continue to
8 provide services (without compensation) to Covad for extended periods even though Covad
9 does not even dispute the amounts due.

10 **III. DISPUTED ISSUE NO. 8-1: DUE DATES FOR AMOUNTS PAYABLE**

11 **Q. PLEASE EXPLAIN DISPUTED ISSUE 8-1.**

12 A. Issue 8-1 relates to Section 5.4.1 of the interconnection agreement, which specifies the
13 number of days Covad has to pay its bills.

14 **Q. WHAT LANGUAGE IS QWEST PROPOSING FOR SECTION 5.4.1?**

15 A. Qwest proposes the following language:

16 5.4.1 Amounts payable under this Agreement are due and payable within
17 thirty (30) calendar Days after the date of invoice, or within twenty (20)
18 calendar Days after receipt of the invoice, whichever is later (payment due
19 date). If the payment due date is not a business day, the payment shall be
20 due the next business day.

1 **Q. HOW DOES COVAD'S PROPOSED LANGUAGE DIFFER FROM QWEST'S**
2 **PROPOSED LANGUAGE?**

3 A. Covad proposes that amounts payable be due and payable within 45 days, rather than the
4 30 days Qwest is proposing.

5 **Q. WHY DOES QWEST BELIEVE THAT 30 DAYS IS A MORE APPROPRIATE**
6 **TIME PERIOD?**

7 A. The 30 day time period balances Covad's need for sufficient time to analyze monthly bills
8 and issue payment with Qwest's right to timely compensation for services rendered. This is
9 the same 30 day time period that is in the current interconnection agreement between
10 Qwest and Covad, under which the parties have been operating since early 1999. This is
11 also the same 30 day time period in Qwest's SGAT, in numerous interconnection
12 agreements with CLECs, as well as in Qwest's FCC access tariff (FCC No. 1) and the
13 Qwest Arizona Access Service Tariff.

14 **Q. WOULD COVAD'S PROPOSAL HAVE AN IMPACT ON QWEST'S CASH**
15 **FLOW?**

16 A. Yes. Under Covad's proposal, Qwest would be receiving payment of the undisputed
17 amounts 15 days later than it currently does and would be deprived, therefore, of use of this
18 money for 15 days. Covad's proposal amounts to a 15-day interest free loan from Qwest
19 to Covad.

1 **Q. WHAT IF THERE IS A DISPUTE OVER A CHARGE ON THE BILL? IS THE**
2 **BILLED AMOUNT STILL DUE WITHIN 30 DAYS?**

3 A. No. The agreed to language in Section 5.4.4 of the agreement discusses in detail how
4 disputed amounts are to be handled, stating that the undisputed portions of the bill shall be
5 paid. If a portion of the bill is disputed and the dispute is resolved in favor of the billed
6 party, the disputed amount and associated interest will be credited or paid to the billed
7 party. Conversely, if the dispute is resolved in favor of the billing party, the disputed
8 portion of the bill becomes due and late payment charges are applied. The language in
9 Sections 5.4.4 and 5.18.5 also allows the billed party to dispute a charge at a later date if it
10 should discover an error after the bill has been paid.

11 **Q. HOW DOES QWEST'S LANGUAGE FOR THE PAYMENT PERIOD COMPARE**
12 **WITH THE LANGUAGE THAT IS IN QWEST'S ARIZONA SGAT?**

13 A, Qwest's proposed language for Section 5.4.1 of the agreement is identical to the language
14 that is contained in Qwest's Arizona SGAT.

15 **Q. WAS THIS ISSUE ADDRESSED DURING THE 271 WORKSHOPS?**

16 A. Yes. During the 271 workshops, in which Covad actively participated, the issue of
17 allowing adequate time to analyze monthly bills was discussed at length. Many of the
18 concerns that Covad raises in this case were thoroughly discussed during these workshops.
19 Ultimately, all issues pertaining to the appropriate time frame for payment, including the
20 timing of discontinuance of orders and disconnection of service which are discussed in
21 more detail below, were resolved and the resulting consensus language is the same as that

1 proposed by Qwest herein. Furthermore, in its recently negotiated Commercial Line
2 Sharing Agreement with Qwest, Covad agreed to payment, discontinuance and
3 disconnection terms which are identical to those proposed by Qwest in this proceeding.

4 **Q. IN PROCEEDINGS IN OTHER STATES, COVAD HAS ARGUED THAT THE**
5 **PAYMENT LANGUAGE AGREED TO IN THE 271 WORKSHOPS IS**
6 **IRRELEVANT HERE. HOW DO YOU RESPOND?**

7 A. I disagree. The 271 proceedings were structured to facilitate an in-depth discussion of the
8 “general terms and conditions” of Qwest’s SGAT. The issue of allowing sufficient time to
9 analyze bills and the issue of the appropriate payment due date were discussed at length by
10 Covad and other CLECs during the General Terms and Conditions workshops. The
11 outcome of these discussions was consensus billing and payment language, which is the
12 same language that Qwest is proposing for the parties’ interconnection agreement.

13 While it has been several years since the 271 workshops that resulted in this consensus
14 language, there are no intervening facts or circumstances that support any change in the
15 payment language. To the contrary, Qwest and Covad have been operating under the same
16 30 day time period for the payment of bills since early 1999. Just as Covad did not object
17 to the 30 day payment due date consensus language during the 271 proceedings, it has not
18 identified any problems with this time period during the course of the parties’ business
19 operations under their existing interconnection agreement.

1 **Q. IN ITS REQUEST FOR ARBITRATION COVAD ARGUES THAT QWEST IS**
2 **LIKELY TO BE MORE CONCERNED NOW THAN IT WAS DURING THE 271**
3 **PROCEEDINGS OVER PAYMENT ISSUES GIVEN THE STATE OF THE**
4 **INDUSTRY AND SEVERAL HIGH PROFILE CASES IN WHICH CLECS HAVE**
5 **FAILED TO PAY QWEST FOR SERVICES. HOW DO YOU RESPOND?**

6 A. The proper focus of this arbitration dispute is whether the Commission should adopt
7 Covad's request to deviate from current industry practice. The industry standard (30 days)
8 is commercially reasonable and balances the legitimate business interests and concerns of
9 the parties. The fact that a number of CLECs have failed to pay Qwest for services that
10 Qwest has provided to them, leaving Qwest with millions of dollars in uncollectible
11 receivables, underscores the legitimacy of the language Qwest proposes here and
12 undermines Covad's argument for *extending* the amount of time within which Covad (and
13 CLECs opting in to this agreement) may withhold payment for services they have received
14 from Qwest and do not dispute they owe Qwest. Covad's proposal would delay Qwest's
15 ability to take commercially-reasonable protective action and exacerbate the risk to Qwest
16 of non-recovery.

17 **Q. HAVE OTHER CLECS AGREED TO THE SAME LANGUAGE QWEST**
18 **PROPOSES HERE?**

19 A. Yes. For example, AT&T/TCG recently completed interconnection negotiations with both
20 parties agreeing to the payment language that Covad challenges here. Not surprisingly,
21 since this language was agreed upon with the CLEC community, numerous CLECs are

1 operating under this payment language here and across Qwest's service territory. In
2 Arizona, 14 CLECs have opted into the Arizona SGAT which contains Qwest's proposed
3 payment language.

4 **Q. WHAT ABOUT COVAD'S ARGUMENTS THAT IT NEEDS MORE TIME TO**
5 **ANALYZE AND PROCESS QWEST'S BILLS?**

6 A. These arguments are belied by the fact that Covad has had years of experience with
7 Qwest's bills and has had ample opportunity to raise any specific concerns about its ability
8 to efficiently analyze and process these bills within the time frame allotted for payment.
9 Through years of experience with Qwest's bills, Covad should have acquired sufficient
10 familiarity and expertise with Qwest's bills to analyze them promptly and efficiently or to
11 seek appropriate business solutions to any general or specific billing problems it might
12 identify.

13 **Q. IN ITS PETITION FOR ARBITRATION, COVAD NOTES THAT "WHILE SOME**
14 **BILLS ARE SENT IN ELECTRONIC FORMAT, OTHERS ARE SENT IN PAPER**
15 **FORMAT ONLY." PLEASE COMMENT.**

16 A. Although the statement is technically correct, Covad omits that the vast majority of
17 Qwest's billing is done electronically. In the case of UNE/Resale, a paper bill is still the
18 official bill of record. However, in addition to the paper bills, Covad receives electronic
19 files for the UNE/Resale bills which provide it with the information that it needs to analyze
20 and review the bills. The only other paper bill Covad is currently receiving is out of the
21 BART system for one-time/non-recurring charges related to collocation. On a region wide

1 basis, this one-time/non-recurring charge for collocation represents only about
2 **CONFIDENTIAL.** **END CONFIDENTIAL** of Covad's total monthly billed
3 amounts

4 **Q. APPROXIMATELY HOW MANY PAGES OF BART BILLING DOES COVAD**
5 **RECEIVE EACH MONTH FROM QWEST?**

6 A. In total, for *all* the Qwest states in which it operates, Covad receives approximately
7 **CONFIDENTIAL.** **END CONFIDENTIAL** pages of BART billing per month.

8 **Q. DOES QWEST HAVE PERSONNEL WHO ARE AVAILABLE TO EXPLAIN ITS**
9 **BILLS TO COVAD AND TO ASSIST WITH ANY BILLING INQUIRIES FROM**
10 **COVAD?**

11 A. Yes. Qwest has a staff of Service Delivery Coordinators whose responsibilities include
12 explaining CLEC bills and answering any questions a CLEC might have about the bills.
13 Qwest has three Service Delivery Coordinators who have been designated to work with
14 Covad.

15 **Q. DOES QWEST HAVE INCENTIVES TO ENSURE THAT ITS BILLS ARE**
16 **ACCURATE?**

17 A. Yes, it does. There are performance measures related to billing completeness and accuracy
18 that are a part of Qwest's Performance Assurance Plan. To the extent billing is inaccurate,
19 there are penalty payments assessed to Qwest. It is in the best interest of both Qwest and
20 Covad that Qwest's bills are complete and accurate.

1 **Q. HAS COVAD HAD DIFFICULTY MEETING THE 30 DAY DUE DATE IN THE**
2 **PAST?**

3 A. No. Qwest's experience has been that Covad pays its bills within the 30 day payment due
4 date.

5 **Q. IN ARBITRATION PROCEEDINGS HELD IN OTHER STATES, COVAD**
6 **ARGUED THAT SINCE COVAD HAD A GOOD BILLING RELATIONSHIP**
7 **WITH QWEST, QWEST SHOULD NOT BE CONCERNED ABOUT EXTENDING**
8 **PAYMENT TIME FRAMES. DO YOU AGREE?**

9 A. No. Given the rights of other CLECs to opt into this new Qwest-Covad interconnection
10 agreement, any CLEC could choose to receive the extended time frames advocated by
11 Covad here.² As a result, Covad's prior payment performance is not the relevant factor in
12 determining whether it is appropriate to require Qwest to continue to provide services for
13 extended periods even though the bill is undisputed. Further, Covad's prior payment
14 performance may not be predictive of Covad's future payment performance. While Covad
15 cites its prior payment performance as a reason why Qwest need have no concerns about
16 Covad, it simultaneously argues for significant extensions of time frames within which
17 Qwest would have no remedy for Covad's nonpayment.

18 **Q. COVAD HAS STATED IN PREVIOUS PROCEEDINGS THAT IT PLANS TO**

² Although the FCC recently eliminated the "pick and choose" option, under FCC rules any carrier may still opt into an interconnection agreement in its entirety, thereby taking advantage of the payment terms, including timing of discontinuing orders and disconnecting service, advocated by Covad in this proceeding.

1 **PARTNER WITH OTHER CLECS TO PROVIDE LINE SPLITTING AND LOOP**
2 **SPLITTING SERVICES. IS THIS SUFFICIENT REASON FOR COVAD TO**
3 **HAVE EXTENDED TIME TO PAY FOR SERVICES IT ORDERS FROM**
4 **QWEST?**

5 A. No. Covad has apparently chosen to change its business strategy and to partner with other
6 CLECs to provide line splitting or loop splitting services. This is, however, no justification
7 for requiring *Qwest* to assume additional risk and deferred payment as a result of a change
8 in Covad's business strategy that does not involve Qwest. That Covad's plans to partner
9 with other CLECs may require significant billing coordination between Covad and its new
10 business partners is an issue that must be addressed by Covad and those new business
11 partners. Covad and its new business partners have no incentive to adopt efficient billing
12 arrangements or to sort out billing issues between themselves if payment to *Qwest* for the
13 services ordered from Qwest can be deferred and the business costs and risk of nonpayment
14 shifted to Qwest.

15 **Q. DO OTHER QWEST CUSTOMERS OPERATE UNDER PARTNERSHIP**
16 **ARRANGEMENTS SIMILAR TO WHAT COVAD MAY BE CONTEMPLATING?**

17 A. Yes. Qwest currently has a number of customers purchasing Line Splitting, a product
18 which allows one company to provide voice service and another company to provide data
19 service over the same line. These customers are operating under the same 30 day payment
20 terms that Covad is disputing here.

21 **Q. WHAT IS COVAD'S PAYMENT POLICY FOR ITS END-USER CUSTOMERS?**

1 A. When billing its customers, Covad uses the same 30 day period that Qwest is proposing to
2 use. Attached as Exhibit WRE-1 is a page from Covad's website:
3 <http://www.covad.com/onlinesupportcenter/resources/explainer/invoice.shtml>. This page
4 contains a sample Covad bill which indicates that the payment due date is 30 days after the
5 invoice date.

6 Covad serves its customers through services it purchases from Qwest. Hence, even as
7 Covad receives payment from its own customers in 30 days for services that include
8 services provided by Qwest, Covad seeks to extend by 50% the amount of time when
9 Covad itself must pay Qwest for these services.

10 **IV. DISPUTED ISSUE NO. 8-2: TIMING FOR DISCONTINUING ORDERS**

11 **Q. PLEASE EXPLAIN DISPUTED ISSUE 8-2.**

12 A. Issue 8-2, which relates to Section 5.4.2 of the interconnection agreement, has to do with
13 the period of time the billing party must wait before discontinuing processing orders in
14 cases of non payment.

15 **Q, WHAT LANGUAGE IS QWEST PROPOSING FOR SECTION 5.4.2?**

16 A. Qwest is proposing the following language:

17 5.4.2 One Party may discontinue processing orders for the failure of the
18 other Party to make full payment for the relevant services, less any
19 disputed amount as provided for in Section 5.4.4 of this Agreement, for

1 the relevant services provided under this Agreement within thirty (30)
2 calendar Days following the payment due date. The Billing Party will
3 notify the other Party in writing at least ten (10) business days prior to
4 discontinuing the processing of orders for the relevant services. If the
5 Billing Party does not refuse to accept additional orders for the relevant
6 services on the date specified in the ten (10) business days notice, and the
7 other Party's non-compliance continues, nothing contained herein shall
8 preclude the Billing Party's right to refuse to accept additional orders for
9 the relevant services from the non-complying Party without further notice.
10 For order processing to resume, the billed Party will be required to make
11 full payment of all charges for the relevant services not disputed in good
12 faith under this Agreement. Additionally, the Billing Party may require a
13 deposit (or additional deposit) from the billed Party, pursuant to this
14 section. In addition to other remedies that may be available at law or
15 equity, the billed Party reserves the right to seek equitable relief including
16 injunctive relief and specific performance.

17 **Q. HOW DOES QWEST'S LANGUAGE DIFFER FROM COVAD'S PROPOSED**
18 **LANGUAGE?**

19 A. Under the Covad proposal, the billing party (Qwest) would have to wait 90 days, not 30,
20 following the payment due date before it could discontinue processing orders.

21 **Q. WHY DOES QWEST OPPOSE COVAD'S PROPOSED 90 DAY PERIOD?**

22 A. Qwest is entitled to timely payment for services rendered and to take remedial action if risk
23 of non-payment is apparent. Under Qwest's proposal, an invoice is not due and payable
24 until 30 days after the invoice date and Qwest cannot take action until another 30 days after
25 that. Since Qwest renders some of its services in the month *before* the invoice date, under
26 the Qwest proposal, Qwest will wait to take action until nearly three months after it has
27 provided the service. Under the Covad proposal, Qwest would be required to wait 135
28 days after the invoice date (45 days to payment due date plus an additional 90 days) before
29 Qwest could take action in cases of non-payment. Taking into account the fact that the

1 service may have been rendered in the month prior to the invoice date, Covad proposes that
2 Qwest wait almost six months after the service was provided before it may discontinue
3 processing new orders. Qwest should not have to wait nearly six months to take action in
4 cases of failure to make payment *for undisputed charges*. Every day of delay may result in
5 additional bad debt, and imposes additional cash flow costs upon Qwest. Because the
6 discontinuance applies only to *undisputed charges*, there is no basis for requiring Qwest to
7 continue to provision services to Covad long after Covad has ceased paying Qwest for
8 services that Qwest has already provided and that Covad does not dispute have been
9 properly billed.

10 **Q. WAS THIS ISSUE ADDRESSED IN THE 271 PROCEEDINGS?**

11 A. Yes. During the 271 proceedings in which Covad actively participated, this issue was
12 discussed at length. Ultimately the Commission approved the consensus SGAT language
13 providing the 30 day time period Qwest advocates in this case.

14 **Q. IS THERE ANY BASIS FOR TRIPLING THE AMOUNT OF TIME THAT QWEST**
15 **MUST WAIT BEFORE IT MAY PROTECT ITSELF BY DISCONTINUING**
16 **PROCESSING ORDERS FOR NONPAYMENT?**

17 A. No. Covad identifies no new facts or circumstances requiring Qwest to continue to process
18 new orders for this extended period of time during which it is *undisputed* that Covad owes
19 Qwest for services that Qwest provided to Covad months earlier. The CLEC community
20 agreed during the 271 process that the thirty day period strikes the proper balance between
21 CLECs' and Qwest's interests. Qwest's proposed language carries forward that balance

1 whereas Covad's proposed language, without justification, shifts to Qwest enormous
2 additional risk of never being paid for the services it provides.

3 **Q. WHAT TIMING FOR DISCONTINUING ORDERS DID AT&T/TCG AND**
4 **QWEST AGREE UPON IN THEIR RECENT INTERCONNECTION**
5 **NEGOTIATIONS?**

6 A. AT&T/TCG and Qwest agreed to the same 30-day period that Qwest is proposing in this
7 proceeding. This 30-day period is in Qwest's SGATs and in numerous interconnection
8 agreements.

9 **V. DISPUTED ISSUE NO. 8-3: TIMING FOR DISCONNECTING SERVICES**

10 **Q. PLEASE EXPLAIN DISPUTED ISSUE 8-3.**

11 A. Issue 8-3, which relates to Section 5.4.3 of the interconnection agreement, has to do with
12 the period of time the billing party must wait before disconnecting service in cases of non-
13 payment.

14 **Q. WHAT LANGUAGE IS QWEST PROPOSING FOR SECTION 5.4.3?**

15 A. Qwest proposes the following language:

16 5.4.3 The Billing Party may disconnect any and all relevant services for
17 failure by the billed Party to make full payment, less any disputed amount
18 as provided for in Section 5.4.4 of this Agreement, for the relevant
19 services provided under this Agreement within sixty (60) calendar Days
20 following the payment due date. The billed Party will pay the applicable

1 reconnect charge set forth in Exhibit A required to reconnect each resold
2 End User Customer line disconnected pursuant to this paragraph. The
3 Billing Party will notify the billed Party at least ten (10) business days
4 prior to disconnection of the unpaid service(s). In case of such
5 disconnection, all applicable undisputed charges, including termination
6 charges, shall become due. If the Billing Party does not disconnect the
7 billed Party's service(s) on the date specified in the ten (10) business days
8 notice, and the billed Party's noncompliance continues, nothing contained
9 herein shall preclude the Billing Party's right to disconnect any or all
10 relevant services of the non-complying Party without further notice. For
11 reconnection of the non-paid service to occur, the billed Party will be
12 required to make full payment of all past and current undisputed charges
13 under this Agreement for the relevant services. Additionally, the Billing
14 Party will request a deposit (or recalculate the deposit) as specified in
15 Section 5.4.5 and 5.4.7 from the billed Party, pursuant to this Section.
16 Both Parties agree, however, that the application of this provision will be
17 suspended for the initial three (3) Billing cycles of this Agreement and
18 will not apply to amounts billed during those three (3) cycles. In addition
19 to other remedies that may be available at law or equity, each Party
20 reserves the right to seek equitable relief, including injunctive relief and
21 specific performance.

22 **Q. HOW DOES THIS DIFFER FROM COVAD'S PROPOSED LANGUAGE?**

23 A. Under Covad's proposal, Qwest would have to wait 120 days, not 60, after the due date
24 before it could begin disconnecting service in cases of non-payment.

25 **Q. WHY DOES QWEST OPPOSE THE 120 DAY PERIOD?**

26 A. As I have discussed above, Qwest is entitled to timely payment for services rendered and to
27 take remedial action if the risk of non-payment is apparent. Under the Qwest proposal,
28 Qwest could not begin disconnection until 90 days after the invoice date (30 days to
29 payment due date plus 60 days before disconnection). The additional two months
30 requested by Covad significantly increases Qwest's financial exposure. Under the Covad
31 proposal, it would be 165 days after the invoice date (45 days to payment due date plus and

1 additional 120 days) before Qwest could disconnect services in cases of non-payment.
2 Taking into account the fact that the service itself may have been rendered in the month
3 prior to the invoice date, this is almost seven months after the service was provided. This
4 is an unreasonable amount of time. Again, the disconnection timing at issue here applies
5 only to undisputed amounts. Disputed amounts are handled pursuant to the language in
6 Section 5.4.4, as I described earlier.

7 **Q. IN ITS PETITION COVAD ARGUES THAT EXTENDING THE TIME IS**
8 **CRITICAL GIVEN THE SEVERE CONSEQUENCES. HAS QWEST EVER**
9 **DISCONTINUED TAKING COVAD ORDERS OR DISCONNECTED SERVICE?**

10 A. No.

11 **Q. WAS THIS ISSUE ALSO ADDRESSED IN THE 271 WORKSHOPS?**

12 A. Yes. During the 271 workshops, this issue was also discussed at length. Ultimately, the
13 issue was resolved with Covad and other CLECs agreeing upon the 60 day proposal that
14 Qwest is making in this case.

15 **Q. WHAT SERVICE DISCONTINUANCE LANGUAGE DID AT&T/TCG AND**
16 **QWEST AGREE TO IN THE RECENT INTERCONNECTION NEGOTIATIONS?**

17 A. AT&T/TCG and Qwest agreed to the same language that Qwest proposes in this
18 proceeding. Again, the 60 days that Qwest proposes is consistent with Qwest's SGATs and
19 numerous interconnection agreements.

1 **Q. DOES THE ARIZONA CORPORATION COMMISSION HAVE RULES**
2 **RELATED TO THE DISCONNECTION OF SERVICE TO CUSTOMERS?**

3 A. Yes. Rule R14-2-508, Section C.2 states that "Bills for telephone services may be
4 considered delinquent 15 days after the date the bill is rendered." Section C.3 states that
5 "Delinquent accounts for which payment has not been received may be terminated 22 days
6 after the bill is rendered." Rule R14-2-509, Sections C., D. and E. layout notice
7 requirements and require the utility to give "at least 5 days advance written notice prior to
8 the termination date."

9
10 **Q. WHAT IS COVAD'S DISCONNECTION POLICY FOR ITS END USER**
11 **CUSTOMERS?**

12 A. Attached as Exhibit WRE-2 is a copy of the Covad Customer Service Policies, which are
13 posted on Covad's website:

14 <http://www.covad.com/online-support-center/resources/legal/docs/Customer>
15 [Policies Direct 030104.pdf](http://www.covad.com/online-support-center/resources/legal/docs/Customer)

16 Page 16 of Covad's policy states that: "If Customer fails to pay any bill when due, Covad
17 shall have the right to terminate the services and charge any disconnection and/or early
18 termination fee that would apply if Customer had elected to terminate the Services."
19 Unlike the language Covad proposes here, this language does not require Covad to wait for
20 any period past the due date before it disconnects services.

2 Q. PLEASE SUMMARIZE YOUR TESTIMONY.

13 Q. DOES THIS CONCLUDE YOUR TESTIMONY?

14 A. Yes, it does.

EXHIBIT WRE-1

COVAD
Covad Communications

Monthly Invoice

XYZ
Account Payable Department
123 Main Street,
Anywhere, USA 12345

Invoice Date: 04/05/03
Invoice No: 461887
Account No: 32488
Billing Period: 04/05/03-05/04/03

Remit To:
Covad Communications
Department 33408
P.O. Box 36000
San Francisco, CA 94139

Total Amount Due: \$769.82
Payment Due Date: 05/05/03

Please print and mail the first page of this email with your payment to the above address.

BILL AT A GLANCE

Previous Unpaid Balance	\$ 300.00
Payment - Thank You	\$ (300.00)
Adjustments	\$ (3.00)
Balance	\$ (3.00)
Current Charges	\$ 717.60
Taxes on Current Charges	\$ 55.22
TOTAL AMOUNT DUE	\$ 769.82
Amount Due in Full by	05/05/03

ACCOUNT SUMMARY

Name	Account Number	Amount
John Smith	12239	\$ 74.90
James Smith	12888	\$ 143.70
Mary Smith	12200	\$ 499.00
CURRENT CHARGES (excludes tax)		\$ 717.60

ADJUSTMENT SUMMARY

Name	Account Number	Service	Charge	Amount
John Smith	12239	Adjustment	Monthly Service	\$ (1.00)
James Smith	12888	Adjustment	Monthly Service	\$ (1.00)
Mary Smith	12200	Adjustment	Monthly Service	\$ (1.00)
TOTAL ADJUSTMENTS				\$ (3.00)

TAX SUMMARY

Taxes	Amount
State	\$ 50.89
County	\$ -
City	\$ 4.33
Local	\$ -
TOTAL TAXES	\$ 55.22

COVAD NEWS

Try Covad's new Hosting Services - risk-free!!! All hosting plans are backed by a 30-day satisfaction guarantee and we'll waive the set-up fee (value \$50) for a limited time! Covad email and Web hosting services allow you to quickly and easily establish your presence on the Internet.

CONTACT US

To view your account details online or to update your account information and payment method, log onto www.covad.net. For questions about this bill, or to make a one time credit card payment please contact Covad Customer Care at 1-888-442-6823. Thank you.

To make it easy for you to pay your invoice or make a query, we've put information that identifies your bill and account all in one place — right in this corner!

Find out at a glance how much you owe in total and when to pay it.

Ready to mail your check? Here's where to send your payment and what information you should include on your check.

Get a quick overview of your bill, including your balance from the last bill, payments processed, adjustments, current charges and taxes on current charges.

This is a summary of your current charges before taxes, including monthly recurring and non-recurring charges. If you have multiple lines, you'll see the current charge for each sub-account listed in this box.

Any adjustments we make to your current charges will appear in this box.

Want to know where your taxes are going? Our bill breaks down by jurisdiction the taxes on your current charges.

Be sure to check this box each month for the latest information about our products, services and promotions.

Got a question about your bill or need to make a change to your Covad service? Refer to this box to find out where to go or whom to call for your customer service needs.

PLEASE DO NOT REPLY THIS IS AN AUTOMATED EMAIL

INVOICE DETAILS

John Smith 321 Main Street Anywhere, USA 32456		Account Number: 12230 Circuit ID: 101-223-100 Additional Info 1 Additional Info 2					
From Date	To Date	Service	Charge	Event Type	Quantity	Price	Total Price
04/05/03	05/04/03	Teleporter Plus	Monthly Service		1	\$ 49.99	\$ 49.99
04/05/03	05/04/03	Basic Hosted	Monthly Service		1	\$ 24.95	\$ 24.95
03/05/03	04/05/03	Adjustment	Monthly Service		1	\$ (1.00)	\$ (1.00)
			State Tax: Taxes			\$ 4.62	\$ 4.62
			City tax: Dallas			\$ 1.46	\$ 1.46
Total Current Charge						\$ 80.02	\$ 80.02

James Smith 322 Main Street Anywhere, USA 32456		Account Number: 12230 Circuit ID: 101-223-100 Additional Info 1 Additional Info 2					
From Date	To Date	Service	Charge	Event Type	Quantity	Price	Total Price
04/05/03	05/04/03	Teleporter 144	Monthly Service		1	\$ 49.99	\$ 49.99
04/05/03	05/04/03	Additional email storage	Monthly Service	3MB	1	\$ 3.75	\$ 3.75
03/05/03	04/05/03	Adjustment	Monthly Service		1	\$ (1.00)	\$ (1.00)
			State Tax: Taxes			\$ 8.92	\$ 8.92
			City tax: Dallas			\$ 2.80	\$ 2.80
Total Current Charge						\$ 64.47	\$ 64.47

Mary Smith 323 Main Street Anywhere, USA 32456		Account Number: 12200 Circuit ID: 101-223-102 Additional Info 1 Additional Info 2					
From Date	To Date	Service	Charge	Event Type	Quantity	Price	Total Price
04/05/03	05/04/03	Teleporter 384	Monthly Service		1	\$ 499.00	\$ 499.00
03/05/03	04/05/03	Adjustment	Monthly Service		1	\$ (1.00)	\$ (1.00)
			State Tax: Tennessee			\$ 37.36	\$ 37.36
Total Current Charge						\$ 535.36	\$ 535.36

Details, details. Here's where to find a quick, easy-to-read explanation of the current charges on your bill. This section itemizes the services we're billing for, and includes monthly recurring charges, non-recurring charges, taxes and any adjustments made to your current bill. If you have multiple lines, you'll find details on each sub-account in a separate box.

For information about your account — including your service address and circuit ID — just turn your attention to this section of your invoice.

EXHIBIT WRE-2

Covad Service Customer Policies

Version 030804

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TeleXtend is a service mark of Covad Communications.*

TELESPEED AND TELEXEND INTERNET SERVICE DESCRIPTION

TELESPEED INTERNET SERVICE

The TeleSpeed Internet Services are Covad's business-oriented Internet Services based on Symmetric Digital Subscriber Line ("SDSL") services provisioned on separate lines from the Customer's phone service. TeleSpeed Internet Services are designed for individuals and businesses who use the Internet for conducting their work and running their businesses. All TeleSpeed orders require a Covad Professional Installation. The availability of TeleSpeed Internet Services depends upon the distance of the Customer from the Central Office of the local telephone company and the condition of the wire from the Central Office to the Customer's premises, otherwise referred to as the Customer Circuit. The TeleSpeed family of Internet Services consists of various speeds, listed in the table below:

Service Name	Maximum Throughput Downstream	Maximum Throughput Upstream	Distance Limitations
TeleSpeed 144	144 kbps	144 kbps	39,600 feet (Verizon East – 18,000 feet)
TeleSpeed 192	192 kbps	192 kbps	15,000 feet
TeleSpeed 384	384 kbps	384 kbps	15,000 feet
TeleSpeed 768	768 kbps	768 kbps	13,000 feet
TeleSpeed 1.1	1,100 kbps	1,100 kbps	12,000 feet
TeleSpeed 1.5	1,500 kbps	1,500 kbps	7,000 feet

To determine the speed a Customer may be able to receive, Covad measures the speed the Customer could get from its equipment at its location to Covad's equipment in the local telephone company's central office. While the distance from the Customer's location to the phone company's central office is a good indication of the speed the Customer may be able to get, there are specific technical limitations that also are considered. Based on certain parameters, it may be necessary for certain orders to be downgraded to the next available speed. If Covad can determine during the provisioning of the order that a

Customer's location does not qualify for the ordered speed, the order will be automatically downgraded to the next available product. While TeleSpeed 1.1 and TeleSpeed 192 are not available for new orders, it is possible that Customers will be downgraded to these products during the provisioning process.

TELEXTEND INTERNET SERVICE

TeleXtend Internet Services are Covad's premium business Internet Services. Using standard T1 technology, TeleXtend Internet Service overcomes the distance limitations inherent in SDSL and Asymmetric Digital Subscriber Line ("ADSL") services, enabling most Customers, located within the serving area of a Covad collocation facility, to receive symmetric speeds of up to 1,500 kbps. All TeleXtend orders require a Covad Professional Installation. The TeleXtend family of Internet Services is offered at full T1 and fractional T1 bandwidth.

Service Name	Maximum Throughput Downstream	Maximum Throughput Upstream
TeleXtend 384	384 kbps	384 kbps
TeleXtend 768	768 kbps	768 kbps
TeleXtend 1.5	1,500 kbps	1,500 kbps

IP ADDRESS PROVISIONING FOR TELESPEED AND TELEXTEND INTERNET SERVICES

Covad provides either one (1) static and public IP address with Network Address Translation ("NAT") or five (5) usable static and public IP addresses without NAT as basic IP configuration options for TeleSpeed and TeleXtend Internet Services. The default IP address setting is 1 static IP with NAT. Additional static and public IP addresses without NAT, in configurations of 13, 29, 61, 125, or 253 usable IP addresses, are available at the time of ordering or after installation for additional setup and recurring charges and for use in accordance with the standards applied by the American Registry Internet Numbers ("ARIN") for the use of all IP space. Customers who wish to purchase 13 or more IP addresses are required to provide information to Covad, in accordance with ARIN guidelines, justifying the usage of the IP addresses before Covad will allocate the additional IP addresses. Covad will provide such Customer-provided information to ARIN upon request from ARIN.

ISP SERVICES FOR TELESPEED AND TELEXTEND INTERNET SERVICES

As part of the TeleSpeed and TeleXtend Internet Services, the Customer will receive the following ISP services:

- Fifteen (15) POP3 email accounts at Covad.net domain
- Fifteen (15) MB web hosting space at Covad.net domain
- Free dial-up services until TeleSpeed or TeleXtend Internet Service is installed
- Ten (10) free hours of local dial-up each month. Additional hours charged at \$1.50 per hour or fraction thereof.
- 24x7x365 customer support
- Access to online SMART Account Manager at www.covad.net

PROFESSIONAL INSTALLATION FOR TELESPEED AND TELEXTEND INTERNET SERVICES

TeleSpeed and TeleXtend Internet Services require Professional Installation services by a Covad Field Service Technician. Covad will schedule an installation time with the Customer to complete the installation process after Covad has confirmed that the Customer's Local Exchange Carrier ("LEC") has provisioned the appropriate loop to the Customer's premises. Professional Installation includes the following on-site services, where required (a limit of 2 hours of included on-site time for each Professional Installation):

- Basic inspection of inside wiring. Maximum of 30 minutes including tracing or toning across phone closets;
and
- Customer Premises Equipment ("CPE") hardware installation of Covad-qualified equipment.

The Professional Installation fee does not include the cost of the CPE. Professional Installation service does not include installation or repair of inside wiring. Customer is responsible for quality and repair of inside wiring.

SERVICE LEVEL AGREEMENT FOR TELESPEED AND TELEXTEND INTERNET SERVICES

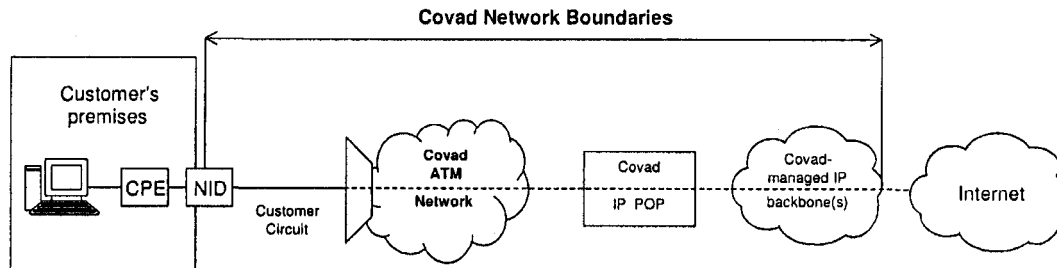
The Covad Service Level Agreement ("SLA") is applicable only to TeleSpeed and TeleXtend Internet Services, and applies only to the Covad Network and TeleSpeed or TeleXtend Customer Circuits. The SLA does not apply to any other services, including but not limited to, TeleSurfer and TeleSoho Internet Services and ISP services (including but not limited to DNS, email, and web hosting). The SLA is applicable only to TeleSpeed and TeleXtend Customers under contract with Covad.

All terms used in this section and not otherwise defined shall have the meaning attributed to such terms in the Customer Agreement (the "Agreement") between Customer and Covad.

DEFINITIONS

Covad Network: "Covad Network" means the infrastructure, facilities, and equipment owned, operated, or controlled by Covad used to provide TeleSpeed and TeleXtend Internet Services. The Covad Network excludes CPE, inside wiring at the Customer's premises, and any network infrastructure, facilities, or other components not owned, leased, operated, or controlled by Covad. See Figure 1.

Figure 1: Covad Network boundaries.



Network Interface Device: "Network Interface Device" ("NID") is defined as the LEC-installed device that connects a Customer's inside wiring to the telephone network.

Customer Circuit: "Customer Circuit" is defined as the physical wiring between Covad's network equipment and the Customer's NID.

Covad IP PoP: A "Covad IP Point of Presence" is defined as a location where Covad's network equipment connects to the public Internet and/or the LEC equipment.

IP Region: An "IP Region" is the set of Covad Service Areas that are served by a particular IP PoP. A listing of Covad IP Regions is available from Covad upon request. Covad may, at its sole discretion, change the number and configuration of IP Regions and the assignment of Service Areas to particular IP Regions. Covad may serve individual Customer Circuits from an IP PoP in a different IP Region.

Installation Interval: For completed Customer Circuits on which billing has commenced, "Installation Interval" is calculated as the number of whole calendar days between (a) the later of (i) the date Covad received the Customer Circuit order from Customer or (ii) the date that Covad has approved Customer's credit application (if applicable) and (b) the Billing Start Date for that Customer Circuit order. This calculation excludes: (a) any period that Covad waits for a response, availability, or action from Customer, (b) any period that Covad waits to install the Customer Circuit resulting from Customer failure to respond, unavailability, lack of access to Customer's facilities, change of requested installation date, or other action or inaction, or (c) any period resulting from a Force Majeure Event.

Service Available: "Service Available" is defined as the ability for a Customer to exchange Internet Protocol ("IP") packets between the Customer's NID and any IP address (of Covad's choice) on the public Internet via the Covad Network.

Service Outage: There is a "Service Outage" on a specific Customer Circuit when IP packets cannot be exchanged between the Customer's NID and any IP address (of Covad's choice) on the public Internet via the Covad Network.

A Service Outage excludes any failures to which any of the following have contributed in whole or in part:

- a) Scheduled maintenance or other planned outages on the Covad Network;
- b) Problems with, or maintenance on, Customer's applications or equipment (including, but not limited to, inside wiring, or changes to or reconfiguration of Customer's CPE not performed by Covad); or
- c) A Force Majeure Event, as defined in the Agreement.

Time to Restore Service: "Time to Restore Service ("TTR")" is defined as the duration of a Service Outage. Time to Restore Service is calculated commencing with the date and time (as set forth on the trouble ticket) on which Covad initially reports the Service Outage on a trouble ticket containing all information necessary for Covad to respond to the trouble ticket and ending upon confirmation by Covad to Customer that the service is restored. This calculation excludes any period that Covad waits for a response, availability, or action from Customer, and further excludes any period Covad spends monitoring the affected Customer Circuit after Covad has restored service to the affected Customer Circuit.

Monthly Service Availability: "Monthly Service Availability" is defined as the percentage of minutes in a calendar month a Customer Circuit did not experience a Service Outage in that month. Specifically, Monthly Service Availability is a percentage calculated as:

$$1 - \left[\frac{\text{aggregate Time to Restore Service for all Service Outages experienced by Customer Circuit in a calendar month}}{\text{total minutes in same month}} \right] * 100$$

Severe Problem: A Customer Circuit is experiencing a "Severe Problem" if the aggregate Time to Restore Service for all Service Outages for such Customer Circuit is in excess of twenty-four (24) hours in any calendar month.

Chronic Problem: A particular Customer Circuit is experiencing a "Chronic Problem" if a subsequent Severe Problem occurs (a) within one (1) calendar month following the calendar month in which a Customer experienced a Severe Problem, and (b) Covad did not recommend to disconnect the Customer Circuit at the time of the prior Severe Problem.

Network Delay: "Network Delay" is defined as the time in milliseconds ("ms") required for a round-trip ping test between the Customer's NID and a Covad IP PoP in a different IP Region, *provided* that the only traffic on the Customer Circuit during the ping test is the test traffic.

Average Network Delay: The "Average Network Delay" on a Customer Circuit is the hourly average of the Network Delay measurements conducted on that Customer Circuit. Average Network Delay is not measured when the Customer Circuit is experiencing a Service Outage.

Delivery: "Delivery" is defined as the percentage of IP packets successfully transmitted between the Customer's NID and a Covad IP PoP in a different IP Region in a period, *provided* that the only traffic on the Customer Circuit during the test is the test traffic.

Average Delivery: The "Average Delivery" on a Customer Circuit is an hourly average of the Delivery measurements conducted on that Customer Circuit. Average Delivery is not measured when the Customer Circuit is experiencing a Service Outage.

Time to Repair Service: "Time to Repair Service" is defined as the duration that the Average Network Delay or Average Delivery on a Customer Circuit exceeds the targets for Average Network Delay or Average Delivery set forth below. Measurement of Time to Repair Service commences with the date and time (as set forth on the trouble ticket) on which Covad reports the Network Delay or Delivery issue on a trouble ticket containing all information necessary for Covad to respond to the trouble ticket and ends upon confirmation by Covad to Customer that performance within the Average Network Delay or Average Delivery targets is restored. This calculation excludes any period that Covad waits for a response, availability, or action from Customer, and further excludes any period Covad spends monitoring the affected Customer Circuit after Covad has restored performance to within the targets for Average Network Delay or Average Delivery for the affected Customer Circuit.

SERVICE LEVELS AND REMEDIES

Installation Interval: Covad's target for Installation Interval for each Customer Circuit is:

Service	Installation Interval Target
TeleSpeed Customer Circuit	30 calendar days
TeleXtend Customer Circuit	30 calendar days

If Covad does not meet the Installation Interval Target for a Customer Circuit per the above definition and Customer requests a credit, Covad will provide Customer with a credit ("**Installation Interval Credit**") of fifty percent (50%) of the first whole month's monthly recurring charge for that Customer Circuit.

Monthly Service Availability: Covad's target for Monthly Service Availability for each TeleSpeed Customer Circuit and TeleXtend Customer Circuit is:

Service	Monthly Service Availability Target
TeleSpeed Customer Circuit	99.9%
TeleXtend Customer Circuit	99.99%

If Covad does not meet the Monthly Service Availability Target for a Customer Circuit per the above definition and Customer requests a credit, Covad will provide Customer a credit of three percent (3%) per hour of the monthly recurring charge for such Customer Circuit for each hour (or fraction thereof, rounded to the nearest fifteen (15) minutes) of Service Outage experienced by the Customer Circuit in excess of the Service Availability Target ("**Service Availability Credit**"); *provided* that in no case will the aggregate of all Service Availability Credits and Time to Restore Credits (defined below) exceed the total monthly recurring charge billed for such Customer Circuit during such month.

Example: For the purposes of illustrating the Service Availability Credit only, if a TeleSpeed 384 Customer Circuit (i.e., monthly recurring charge of \$179.00) experiences a single Service Outage with Time to Restore Service of 14 hours, 22 minutes in January 2003, Covad will calculate the Service Availability Credit in the following manner:

- 1) Subtract Monthly Service Availability Target (in minutes) from the Time to Restore Service for the Service Outage for the month to determine the Time to Restore Service in excess of the Monthly Service Availability Target. In this case, the calculation is 14 hours, 22 minutes Time to Restore Service – 45 minutes allowable Service Outage time (1-99.9% of 44,640 minutes in January) = 13 hours, 37 minutes outage in excess of target;
- 2) Round to the nearest 15 minutes = 13 hours, 30 minutes;
- 3) Multiply by 3% per hour = 41% of monthly recurring charge;
- 4) Multiply by monthly recurring charge (\$179.00) = **\$73.39 Service Availability Credit.**

Time to Restore Service: Covad's target for Time to Restore Service for each Service Outage experienced by a TeleSpeed Customer Circuit or TeleXtend Customer Circuit is:

Service	Time to Restore Service Target
TeleSpeed Customer Circuit	24 hours
TeleXtend Customer Circuit	4 hours

If Covad does not meet the Time to Restore Service Target for a Service Outage on a Customer Circuit per the above definition and Customer requests a credit, Covad will provide Customer a credit of ten percent (10%) of the monthly recurring charge for that Customer Circuit ("**TTR Credit**"), in addition to any other applicable credits for Service Availability, *provided* that in no case will the aggregate of all Service Availability Credits and TTR Credits for that Customer Circuit in a month exceed the total monthly recurring charge billed by Covad for such Customer Circuit for service during such month.

Severe and Chronic Problems: For any Customer Circuit that Covad verifies has experienced a Severe Problem, Covad may recommend to disconnect the affected Customer Circuit. If Covad recommends to disconnect the affected Customer Circuit, Covad will provide a credit to Customer for the amount of such disconnection fee (if any) assessed by Covad.

For any Customer Circuit that Covad verifies has experienced a Chronic Problem, Customer may give Covad approval to disconnect such Customer Circuit, and Covad will provide a credit to Customer for the amount of any disconnection fee (if any) assessed by Covad.

Average Network Delay: Covad's Average Network Delay target for all TeleSpeed & TeleXtend Customer Circuits is:

Service	Average Network Delay Target
TeleSpeed Customer Circuit	110 milliseconds ("ms")
TeleXtend Customer Circuit	110 ms

If Covad does not meet the Average Network Delay Target for a Customer Circuit in a month per the above definition and Customer requests a credit, Covad will credit the Customer ("Network Delay Credit") according to the following table:

If Average Network Delay Time to Repair Service exceeds:	Network Delay Credit is:
One (1) hour in a calendar month	Five percent (5%) of the monthly recurring charge for that Customer Circuit
Two (2) hours in a calendar month	Ten percent (10%) of the monthly recurring charge for that Customer Circuit

Average Delivery: Covad's targets for Average Delivery for all TeleSpeed and TeleXtend Customer Circuits are:

Network	Average Delivery Target
TeleSpeed Customer Circuit	99.9%
TeleXtend Customer Circuit	99.9%

If Covad does not meet the Average Delivery Target for a Customer Circuit per the above definition and Customer requests a credit, Covad will credit the Customer ("Delivery Credit") according to the following table:

If Average Delivery Time to Repair Service exceeds:	Delivery Credit is:
One (1) hour in a calendar month	Five (5%) of the monthly recurring charge for that Customer Circuit
Two (2) or more hours in a calendar month	Ten (10%) of the monthly recurring charge for that Customer Circuit

CLAIMS AND CREDIT AVAILABILITY

It is the Customer's responsibility to identify, request and document all bona fide SLA claims and corresponding credits. The easiest way for Customers to notify Covad of an SLA claim is to submit the email form located in the Customer Support section of SMART Account Manager. To be eligible for service credits, Customer must first report service availability, delay, or delivery events to Covad Customer Care. Covad will notify Customer of its resolution of the reported event. Customer must claim any applicable service credits by the 15th day of the month following the month in which (a) the reported incident was resolved (in the case of credits for Service Availability, Time to Restore Service, Network Delay, or Delivery credits) or (b) the Billing Start Date of the affected Customer Circuit (in the case of Installation Interval credits). Covad will verify the Customer's claim within thirty (30) days of a complete and properly submitted credit request, and will apply any applicable credits, as determined at Covad's sole discretion, to the Customer's invoice issued on the next billing anniversary date following Covad's thirty (30) day review. **NOTE: Total credits in a given month on a TeleSpeed or TeleXtend Customer Circuit may not exceed the monthly recurring fees charged by Covad for such Customer Circuit during such month. Any excess credits will not carry over into later invoices.**

For the purposes of illustrating the timelines for Credit Availability only, if Covad resolves an incident in January 2003 – regardless of when Covad opened the trouble ticket for the incident – and Customer wishes to receive a credit for the incident, Customer must claim the applicable credits by February 15, 2003. If the claim is complete and is properly submitted, Covad will verify the claim by March 15, 2003, and will apply any applicable credit to Customer's next invoice. *Customer may not, under any circumstances, submit credit requests after the date to submit service credit requests set forth above has passed; Covad will not accept late credit requests.*

Requests for SLA credits must be submitted to Covad Customer Care in writing or by email to support@covad.net. A separate credit request must be submitted for each Customer Circuit for which a claim is made. In addition, a separate credit request must be submitted for each type of credit (e.g., Service Availability Credit, Installation Interval Credit, etc.) requested if multiple types of claims are made on a single Customer Circuit; *provided, however*, that requests for Service Availability Credits and Time to Restore Credits for a single Customer Circuit may be made via the same credit request.

Covad will reject any credit requests that do not provide sufficient supporting information to allow Covad to verify the claim. Such information must include:

- The contact name for the TeleSpeed or TeleXtend Internet Service on which the incident occurred;
- The Covad circuit number for the TeleSpeed or TeleXtend Customer Circuit on which the incident occurred;
- The specific type of credit being requested;
- The date(s) of the resolution of the trouble ticket(s) (for credits for Service Availability, Time to Restore Service, Network Delay, or Delivery) or the Billing Start date (for credits for Installation Interval) for the incident; and
- Any other information that Covad may reasonably request to assist Covad in verifying Customer's credit request.

Covad does not guarantee that provision of the above information will be sufficient to allow Covad to verify the request. Covad will inform Customer of credit requests rejected for insufficient information, and Customer will be allowed to resubmit such requests with additional supporting information within five (5) business days of Covad's notification of its rejection of the credit request. After Customer resubmits the credit request with the additional supporting information, the standard verification and crediting timelines (outlined above) will apply. Covad will notify of results within 5 business days of receipt of such requested additional information.

Covad reserves the right to modify the format for submission of, and information required for, SLA credit requests.

Covad may, at its reasonable discretion and without notice, limit or eliminate Customer's eligibility and ability to submit SLA credit requests if (a) Customer has an undisputed past-due amount owed to Covad or (b) in Covad's sole determination, Covad determines that Customer has:

- Failed on one or more occasions to comply with the credit request policies and requirements described herein;
- Submitted an excessive number of rejected SLA credit requests; or
- Used, or attempted to use, the SLA credit process in a frivolous, abusive, or fraudulent manner.

Covad will restore Customer's ability to submit SLA credit requests once Customer (i) has paid all amounts owed Covad (in case of failure to pay outstanding invoices), or (ii) in all other cases, provides to Covad assurances sufficient for Covad to determine Customer has cured the conduct that initiated Customer's ineligibility to participate in the SLA.

TELESPEED EXTENDED COVERAGE AREAS SERVICES

Covad offers Customers service in Covad's extended coverage areas, which are beyond the areas covered by Covad's network (the "ECA Services"). However, the ECA Services differ from Covad's standard Services in various ways that are described below. If Customer purchases ECA Services, the following will apply:

Service Branding. The names of the SDSL ECA Services will be tied to the corresponding Covad Service Name set forth below. For all other purposes except as set forth herein, the ECA Service will be treated as the corresponding Covad Service. T1 and ADSL Services are not available as ECA Services.

Covad Service Name	ECA Service Name
TeleSpeed 144	TeleSpeed 144 ECA
TeleSpeed 192	TeleSpeed 192 ECA
TeleSpeed 384	TeleSpeed 384 ECA
TeleSpeed 768	TeleSpeed 768 ECA
TeleSpeed 1.1	TeleSpeed 1.1 ECA
TeleSpeed 1.5	TeleSpeed 1.5 ECA

Professional Installation and Field Service. All ECA Services will be provisioned and all field service dispatches will be serviced by a Field Service Technician from one of Covad's partners rather than a Covad Field Service Technician. As a result, Covad waives all liability for installation or field service related issues, including but not limited to, personal injury, death or tangible or intangible property damage.

SLAs. All SLAs remain as set forth for standard Covad Services, with the exception that there will be no SLAs for Time to Restore Service (TTR), for Monthly Service Availability, or for Average Network Delay.

CPE. Customer-provided and Customer-managed CPE may not be used with ECA Services without prior written consent of Covad. The CPE available will be limited to: SDSL CPE: Efficient 5851 and IDSL CPE: Efficient 5871. Covad will provide a one-year limited warranty on this CPE as follows: If, during the warranty period, Covad deems the equipment to be faulty and believes that a replacement is needed, a replacement CPE will be shipped to the Customer within three (3) business days. If a technician visit is also required, Covad's standard fees for a technician dispatch will apply.

Move Orders and Changes. Disconnection and a new order will be required for moves and CPE may not be transferred to a new location. Moves within a Customer location also require a new installation and Customer will be billed for such new installation. Upgrade and downgrades during an order will not be permitted; however, Customers can upgrade or downgrade after the order has been installed by calling Covad (standard upgrade and downgrade terms and conditions apply).

SMART Account Manager. Certain SMART account manager functionality will not be available to manage the ECA Service accounts online and certain information may not be available for viewing in real-time.

Loop Conditioning. In the event that loop conditioning is required on a Customer Circuit, Covad may charge a fee of \$199.00 per Customer Circuit

TELESURFER AND TELESOHO INTERNET SERVICE DESCRIPTION

TeleSurfer and TeleSoho services are Internet Services based on Asymmetric Digital Subscriber Line ("ADSL") services provisioned on a shared-line basis (meaning that the Customer will receive ADSL services over the same line on which he or she currently receives his or her voice service). The availability and performance of TeleSurfer and TeleSoho Internet Services depends the distance of the Customer from the Central Office of the local telephone company and the condition of the wire from the Central Office to the Customer's premises. To subscribe to Covad ADSL services, Customers must have local telephone service through one of the following companies: SBC, Verizon, Qwest, or BellSouth. If Customer has local phone service with one of the listed companies at the time of the Covad order, and subsequently changes their voice service while subscribing to Covad ADSL service, Customer will lose their Covad service and will be charged any applicable early termination/disconnection fees if the termination occurs during the Minimum Term. This is the nature of line-sharing services, and cannot be altered for individual customers.

Service Name	Installation Service	Maximum Throughput Downstream	Maximum Throughput Upstream	Distance Limitations
TeleSurfer Link*	Self Installation or Professional Installation	Up to 384 kbps	Up to 128 kbps	18,000 feet
TeleSurfer*	Self Installation or Professional Installation	Up to 608 kbps	Up to 128 kbps	18,000 feet
TeleSurfer Plus	Self Installation or Professional Installation	Up to 1,500 kbps	Up to 128 kbps	18,000 feet
TeleSoho	Self Installation or Professional Installation	Up to 1,500 kbps	Up to 384 kbps	18,000 feet
TeleSoho 3.0/768	Self Installation or Professional Installation	Up to 3,000 kbps	Up to 768 kbps	10,000 feet

* These services have been discontinued for new orders.

TeleSurfer and TeleSoho Internet Services are "*commercially reasonable efforts*" services. This means that Covad does not guarantee any upstream or downstream speeds. Service speeds are dependent on the distance of the Customer from the Central Office and the condition of the Customer Circuit, among other factors. TeleSurfer and TeleSoho Internet Services that pass at least 128 kbps of bandwidth downstream and 64 kbps of bandwidth upstream is considered to meet the service's performance standard ("**Performance Standard**"). The exception is TeleSoho 3.0/384 which has a performance standard of 1500 kbps downstream and 128 kbps upstream. Customers that order TeleSoho 3.0/768 service and cannot realize the Performance Standard, can disconnect their Service (within 30 days of the billing start date) or downgrade TeleSoho 1.5/384. TeleSurfer and TeleSoho Internet Services are *rate adaptive* ADSL services. This means that Customers may experience downstream speeds between 1,500 kbps and 3,000 kbps for TeleSoho 3.0/768, 128 kbps and 1,500 kbps for TeleSurfer Plus and TeleSoho 1.5/384, between 128 kbps and 608 kbps for TeleSurfer, and between 128 kbps and 384 kbps for TeleSurfer Link. For the purposes of determining this speed, Covad measures the speed the Customer can get from its equipment at its location to Covad's equipment in the local telephone company's central office.

IP ADDRESS PROVISIONING FOR TELESURFER AND TELESOHO INTERNET SERVICES

TeleSurfer Internet Services will be provisioned with one (1) dynamic IP address via PPPoE (Point to Point Protocol over Ethernet). Covad will provide the PPPoE software to the Customer in the Covad Self Installation Kit. Static IP addresses are not available with any TeleSurfer services.

TeleSoho Internet Services will be provisioned with one (1) fixed and public IP address with Network Address Translation. When NAT is chosen as the IP configuration, the static IP address is terminated on the Customer Premises Equipment and cannot be assigned to individual computers or devices. TeleSoho Customers may also choose five (5) static and public IP addresses without NAT for an additional fee.

ISP SERVICES FOR TELESURFER AND TELESOHO INTERNET SERVICES

As part of TeleSurfer and TeleSoho Internet Services (excluding TeleSurfer Link), the Customer will receive the following ISP services:

- Fifteen (15) email accounts at Covad.net domain
- Ten (10) MB web space at Covad.net domain
- Free dial-up services until TeleSurfer or TeleSoho Internet Service is installed
- Ten (10) free hours of local dial-up each month. Additional hours charged at \$1.50 per hour or fraction thereof.
- 24x7x365 customer support
- Access to online SMART Account Manager

ISP SERVICES FOR TELESURFER LINK INTERNET SERVICE

As part of the TeleSurfer Link Internet Service, the Customer will receive the following ISP services:

- One (1) email account at Covad.net domain
- Free dial-up service until TeleSurfer Link Internet Service is installed
- Dial service charged at \$1.50 per hour or fraction thereof
- 24x7x365 customer support
- Access to online SMART Account Manager

SELF INSTALLATION FOR TELESURFER AND TELESOHO INTERNET SERVICES

For all Self Installation Services, the Customer is responsible for performing all installation activities at the Customer's premises. Covad will ship the DSL equipment in a Self Installation Kit directly to the Customer after verification that Customer's LEC will provide the DSL capable loop. Covad offers technical telephone assistance to assist the Customer with any installation issues. If the Customer is unable to complete the installation, the Customer can request a Professional Installation by calling Covad Customer Care at 1-888-64-COVAD. Please note that Covad charges a fee for Professional Installation services. Covad will close the order and begin billing after the Customer's LEC confirms that the DSL capable loop has been delivered, or when Covad detects traffic on the Customer Circuit, whichever occurs first. The Self Installation Kit for TeleSurfer and TeleSoho Internet Services includes the following components:

- Ethernet Bridge (TeleSurfer Internet Services) or ADSL router (TeleSoho Internet Services)
- Ethernet cable

- Phone cord/cable
- Five (5) analog DSL filters – 4 in-line filters and one wall mount filter
- User Guide and Troubleshooting CD
- Tango DSL Connection Software (TeleSurfer Internet Services)

PROFESSIONAL INSTALLATION FOR TELESURFER AND TELESOHO INTERNET SERVICES

If the Customer has selected a Professional Installation at the time of order entry, Covad will schedule an installation time with the Customer to install the DSL Installation Kit. Prior to the Professional Installation, Covad will ship the DSL equipment, including the bridge or router, to the Customer. The Customer can complete the installation of the DSL equipment, and request that the Professional Installation be cancelled by calling Covad Customer Care at least one (1) business day prior to the scheduled installation date to avoid a cancellation charge. In addition, if Customer is unable to install the Self Installation Kit, Customer may request a Professional Installation by calling Covad Customer Care at 1-888-64-COVAD. Please note that Covad charges a fee for Professional Installation services.

Professional Installation includes the following on-site services, where required (limit of 2 hours of on-site time for each Professional Installation):

- NID Splitter or in-line filter installation including cost of filters or splitter;
- Basic inspection of inside wiring. Maximum of 30 minutes including tracing or toning across phone closets;
- Hardware installation of Covad-provided DSL equipment;

Professional Installation fee does not include CPE fees. Professional Installation service does not include installation or repair of inside wiring, installation of software on the Customer's computer, or any work necessary on the Customer's Local Area Network (LAN). Customers are responsible for quality and repair of inside wiring, any software installation, and work necessary to connect their LAN to the Covad DSL service. Tango DSL Connection Software is compatible with the following operating systems: Windows 98/98SE, Windows NT 4.0 or higher, Windows ME, Windows 2000, Windows XP Home, Windows XP Pro, Mac OS 8.6, Mac OS 9.1 or higher, and Mac OS 10.1 or higher. TeleSurfer customers with an operating system other than one of these must provide their own PPPoE connection software. Covad Customer Care will not support any PPPoE connection software other than that provided in the Covad installation kit.

DIAL INTERNET SERVICE DESCRIPTION

As part of the Dial Internet Service, the Customer will receive the following:

- 150 hours of dial service each month; additional hours charged at \$1.50 per hour or fraction thereof.
- Five (5) email accounts at Covad.net domain
- Ten (10) MB web space at Covad.net domain
- 24x7x365 customer support
- Access to online SMART Account Manager tool

INTERNET SERVICES POLICIES

Only Covad technicians may complete delivery of a Customer Circuit (except in the case of Self Installation Services). Covad will not authorize the Customer or a Customer-designated vendor to complete Customer Circuit delivery. This applies to all TeleSpeed and TeleXtend Internet Services and TeleSurfer or TeleSoho Professional Installation Services, but does not apply to Self Installation Services until such time that any of the Services rendered under Professional Installation are needed or specifically requested by Customer (e.g., NID splitter installation is required).

If Covad cannot deliver the ordered service due to technical issues, and the Customer does not want a downgraded service speed, Covad will allow the Customer to cancel the order. The Customer will not be liable for any service setup and equipment

fees, other than fees for Missed Appointments (if applicable). For TeleSpeed orders, a service installation will be considered successful if a signal is successfully passed from Covad's IP PoP to the NID at the Customer's premises at the minimum requested bitrate in each direction.

Due to the rate adaptive nature of ADSL orders, the technician will not change a TeleSurfer or TeleSoho Internet Service order while completing the installation. The TeleSurfer or TeleSoho order is closed and billed at the rate of the service ordered. If not satisfied, the Customer has thirty (30) calendar days from completion of the TeleSurfer or TeleSoho order to submit a change order at no charge by calling Covad Customer Care at 1-888-64-COVAD to downgrade or cancel the order. On downgrades, Covad does not refund the difference in service pricing on previous service charges.

STANDARD INSIDE WIRING POLICIES FOR TELESPEED AND TELEXEND INTERNET SERVICES

Standard Inside Wiring Services, as outlined below, for TeleSpeed and TeleXtend Internet Services are not billable. The technician will perform the following services as necessary (provided that such services can be completed within the two hour installation window):

- Positive identification of a new Covad circuit delivered to the Customer's NID;
- Toning, tracing and completing all necessary cross connects on existing inside wiring between the Covad circuit at the NID and the Customer's designated jack location;
- Wiring of the existing jack to support the DSL or T1 router, *provided that* existing wiring is available;
- Router configuration and line test; and
- Any inside wiring that the technician can complete within 15 minutes.

For any TeleSpeed and TeleXtend inside wiring beyond the Standard (non-billable) Inside Wiring Services listed above, Covad charges standard rates for billable inside wire services. Please see the Other Fees for Covad Services section of this document. Before performing any inside wiring beyond Standard Inside Wiring Services for TeleSpeed and TeleXtend Internet Service, the technician will require the Customer's signature on an Inside Wiring Authorization Form to acknowledge that additional charges may be associated with the work about to be performed.

ADDITIONAL INSIDE WIRING POLICIES

Depending on the extent of inside wiring required, Covad may not be able to complete the inside wiring. The Customer is responsible for completing the wiring or contracting a third-party for such services. Covad does not provide extensive inside wiring services as part of our order delivery process. If the technician determines that extensive inside wiring is required, the technician will confirm successful service activation at the NID. The technician will leave the configured CPE with the Customer, and Covad will close the order. If Covad agrees to do the inside wiring, Covad will schedule such extensive inside wiring as close as possible to the installation services date, and Covad will charge the Customer additional fees for such inside wiring work. Please see the Other Fees for Covad Services section of this document for further details. Covad reserves the right to refuse to do any extensive inside wiring work requested. If the order is cancelled due to extensive inside wiring, Covad will assess standard cancellation and disconnect charges as specified in the Other Fees for Covad Services section.

Extensive inside wiring includes, but is not limited to:

- Tracing and testing existing wire through multiple units, multiple stories, or multiple telephone closets in a high-rise building or business park;
- Other complex wiring situations where physical laying of cable or wiring is required;
- New wiring due to service location greater than 50 feet from the NID;
- Wiring from the NID to a desired location; or
- Moving an existing jack to another location.

CONFIGURATION OF SERVERS

Covad also utilizes certain Internet tools and software to verify the configuration of servers connected to Covad's network. Customers may not operate servers in an "open relay" configuration (a configuration whereby a mail server processes email messages where neither the sender nor the recipient is a local user), as servers configured in this manner expose both Covad's network and that particular Customer to fraudulent and abusive use by third parties. If a Customer requires assistance in determining the configuration of a server and/or instructions to secure a server, please contact abuse-team@covad.com. Please refer to Covad's Acceptable Use Policy, posted at <http://covad.net/legal/>.

CUSTOMER PREMISES EQUIPMENT LIMITED WARRANTY

If Customer purchases Customer Premises Equipment directly from Covad, the equipment carries a one-year limited warranty, beginning on the Billing Start Date for the Covad Internet service. If, during the warranty period, Covad deems the equipment to be faulty and believes that a replacement is needed, Covad will:

1. For TeleSpeed and TeleXtend Internet Services, Covad will schedule a technician to go to the Customer's location. Customer will not be billed for a technician visit unless the technician determines the equipment failure was due to the Customer's negligence or abuse of the equipment, in which case Covad's standard fees for a technician dispatch will apply (in addition to Covad's then-standard fees for the replacement CPE).
2. For TeleSurfer and TeleSoho Internet Services, Covad will ship replacement equipment to the Customer and provide freight prepaid packaging for return of the faulty equipment. Instructions on the returns process are available by calling the Covad Customer Care. Covad requires that the Customer return the faulty equipment. In the event the Customer does not return the faulty equipment, Covad will charge Customer the current standard price for a replacement Self Installation Kit.

After expiration of the one-year limited warranty period, Covad will replace such out-of-warranty CPE; provided, however, that Customer will be responsible for the standard charge for the CPE and the technician visit (if applicable). In any instance where Customer pays for new CPE, the warranty period will be reset and will begin on the date the equipment is delivered to the Customer. The warranty period is not reset for warranty replacement equipment that Covad provides free of charge. Covad will only honor the original one-year warranty period that began with the purchase of the original equipment. Customers that migrate to Covad Broadband Solutions from another Covad wholesale partner are not eligible for a new warranty period. Warranty periods are only reset when the Customer pays for a new CPE.

HOSTING SERVICES DESCRIPTION

Covad Hosting Services includes Email and Web Hosting Services. These services allow Customers to outsource the storage, hardware and software requirements for their email system and Web site. In exchange for providing this online service, Covad charges a monthly fee, a set up fee for certain plans, and any other applicable fees set forth below. Covad Hosting Services are designed for individuals and businesses who want to establish an identifiable presence on the Internet. Using these services, Customers can:

- Register a new or transfer an existing domain;
- Include their domain in their email address(es);
- Use Covad-provided or non-Covad provided software to build and manage a web site; and
- Host the Web site on Covad-provided servers, enabling end-users to access the Customer's site.

Covad Hosting Services are available to all broadband access Customers and are not restricted by physical location.

COVAD EMAIL AND WEB HOSTING PLANS

	Email Only	Basic	Enhanced	Premium
Number of Email boxes	10	20	30	50
Web Site Storage (MB)	NA	50	100	250
Web Site Transfer (MB)	NA	2,500	5,000	10,000
Covad Web Builder	NA	Yes	Yes	Yes
Web Reporting	NA	Yes	Yes	Yes
Webmail	Yes	Yes	Yes	Yes
Email Storage (MBs/ mailbox)	10	10	10	10
Web site storage (MBs)	N/A	50	100	250
Web site transfer speed (MBs/mo)	N/A	2,500	5,000	10,000

*The Email Only plan entitles the Customer to register a domain and use email associated with their domain but does not include any web design and webhosting features.

**Additional email boxes, email and web site storage, and website transfer are available for the additional fees described below.

Covad Hosting Services are shared, meaning that a Customer's web site co-exists with other Customers' sites on the same Covad web server. The benefits to Customers of shared services are that they are more efficient and less expensive.

CONTRACTS

All Customers must accept the Covad Hosting Services Agreement. The contract term is month-to-month and may be canceled by either party as described below. There is no cancellation fee associated with Covad Hosting Services, except that Covad will not refund fees paid to Covad prior to cancellation of the Agreement or any fees collected for domain name registrations. Customers are required to abide by the terms outlined in the Hosting Services Agreement, these Customer Policies and the Acceptable Use Policy. Covad reserves the right to cancel a Customer's service for violation of these terms.

CANCELING SERVICE

Cancellation can occur for one of two reasons:

1. Customer-initiated cancellation:

A Customer may cancel its hosting plan at any time. In the event that a Customer cancels its hosting plan but wishes for Covad to maintain its domain name, the account will remain active and Covad will bill the Customer for the periodic (annual) domain name registration fee. If a Customer cancels its Covad access service, the hosting plan can remain in service and Covad will bill the Customer for the monthly recurring fees for the hosting plan and the periodic (annual) domain name registration fee.

2. Covad-initiated cancellation

Covad retains the right to cancel service at any time by providing Customer with thirty (30) days notice. Covad also retains the right to cancel service at any time for reasons related to:

- Non-payment or other breach of the Hosted Service Agreement
- Violation of the terms in these Policies or the Acceptable Use Policy

All Customer-initiated cancels must be done by calling Covad Customer Care at 888.64.COVAD or by faxing a notice of cancellation Covad at 866.839.2887. In some cases where a Customer has ordered a broadband access service and a hosting plan at the same time, Covad discovers after the order is submitted that it cannot provide broadband access service to the Customer's location. In this instance, Covad will notify Customer via email that Covad was not able to provision the access service that Customer had requested, and Covad will ask Customer if Customer would like to continue with its hosting plan. The Customer has five (5) days to notify Covad of its intent to keep its hosting plan. If the Customer does not notify Covad within five days that Customer would like to keep its hosting plan, Covad will cancel the hosting plan on the sixth (6th) day after email notification.

COVAD EMAIL AND WEB HOSTING SERVICE CUSTOMER CARE POLICY

Covad provides 24x7x365 support for Customers using any hosting plan and covers issues related to:

- Ordering a hosting plan
- Registering or transferring a domain
- Setting up a web site using Covad-provided software
- Helping manage any hosting service features and settings
- Troubleshooting technical problems related to Covad hosting services

As a policy, Covad will not provide support for Hosting Services other than as listed above. In particular, Covad will not:

- Contact the other registrar/provider on behalf of the Customer to transfer a domain
- Resolve domain transfer problems that are caused by the other registrar/provider
- Call the Customer when the domain has been successfully transferred. This can be monitored in SMART.
- Build a web site for the Customer
- Answer in-depth questions about non-Covad-provided web design software (i.e., FrontPage)
- Debug HTML, ASP, or Perl code
- Perform data mining analysis

ADDITIONAL EMAIL AND WEB HOSTING SERVICE FEES

Add-on Features	Monthly Price
Additional Mailboxes	\$2 per email box
Additional Email storage	\$3.75 per 5 MBs
Additional Web site storage	\$3.75 per 5 MBs
Additional Web site transfer	\$1 per 100 MBs
Domain Name Registration	\$20 per year

CONTENT MANAGED AND DISTRIBUTED USING COVAD EQUIPMENT AND FACILITIES

By definition, the Customer is using Covad equipment and facilities to store and distribute content via email and a web site. As such, Covad's reputation is at risk if a Customer abuses acceptable use policies set forth by Covad. Please see the Covad Acceptable Use Policy ("AUP") to become familiar with these issues.

TELEDEFEND SECURITY SERVICES DESCRIPTION

Service Name	Description
TeleDefend Firewall	Managed firewall service based on NetScreen device and using stateful packet inspection. Covad pre-configures and/or remotely configures the NetScreen device per Customer's order but Customer must self-install the NetScreen device. Once installed, Covad provides remote 24x7x365 customer support and 24x7x365 health monitoring.
TeleDefend VPN/Firewall	Site-to-site virtual private networking ("VPN") service based on NetScreen device and using IPSec Triple DES ("3DES") encrypted tunnels. Also includes a managed firewall, which uses stateful packet inspection. Covad pre-configures and/or remotely configures the NetScreen device per Customer's order but Customer must self-install the NetScreen device. Once installed, Covad provides remote 24x7x365 customer support and 24x7x365 health monitoring.

Covad may supply new or recertified equipment on new orders. Recertified equipment is equipment that (a) may have been removed from its original packaging by Covad or returned to Covad by an End User after a promotional offer, (b) is free from visible defects, and (c) is equivalent in function and appearance to new units. On new and recertified equipment purchased by Customer through Covad, Covad will provide a one (1) year replacement warranty from the Billing Start Date for manufacturer's defects. At Covad's discretion, any equipment Covad supplies as replacement equipment for existing equipment (e.g., for warranty purposes) may be new, recertified or refurbished. Refurbished equipment is previously owned equipment that has been remanufactured by the manufacturer or its agent, is free from visible defects, and is equivalent in functionality to new units. Any equipment supplied as replacement equipment will carry the remainder of the one (1) year warranty described above.

FIREWALL CONFIGURATIONS

Customers can specify up to 20 total incoming and outgoing policies for TeleDefend Firewall or TeleDefend VPN/Firewall Services. These policies can be customized to meet most Customer requirements. Customers can define an inbound policy to block all incoming connections for maximum security, or define an inbound policy that will allow access only to host servers for email, web pages, or almost any other IP based service. Outbound policy definitions can be created to limit the types of applications that can be accessed by users from within the network. For example, web surfing can be limited to only specific computers. Customers will work with a designated Covad Sales Engineer to define and implement TeleDefend Firewall and TeleDefend VPN/Firewall Services.

TELEDEFEND PROVISIONING

For each TeleDefend Service, Covad follows the following provisioning process:

- Covad configures the NetScreen device prior to shipping to Customer in the TeleDefend Self Installation Kit. The Self Installation Kit includes one (1) NetScreen device with a static and public IP address assigned, required cables, and installation instructions. For TeleDefend VPN/Firewall services, one (1) NetScreen device is needed for each site.
- Covad ships TeleDefend Self Installation Kit(s) to Customer's site(s). Covad notifies Customer of shipped TeleDefend Self Installation Kit(s) via an email, which includes shipping information. Upon receipt, Customer installs NetScreen device per installation instructions and calls Covad Customer Care to finalize configuration and activate service.
- Covad commences billing at the earlier of: (a) the time at which Customer has successfully completed the installation process and Covad has confirmed activation in an email and/or phone call, or (b) ten (10) business days after Covad has shipped the TeleDefend Self Installation Kit.

TELEDEFEND SERVICE LEVEL AGREEMENT

TeleDefend Customers receive TeleDefend-specific SLA. Additional SLAs might apply based upon the access service subscribed to by the customer. The TeleDefend SLA represents Covad's commitment to providing reliable security services for its Customers and is Customer's only remedy for service-related issues.

Time to Respond: Covad will respond to each TeleDefend configuration change request or trouble ticket within 24 hours. If Covad does not respond within such a 24 hour period, Covad will credit Customer 10% of monthly TeleDefend Service charges at the affected site per incident, up to a maximum of 30% per month. The Customer must proactively report failure to meet this SLA to receive credit for the month of the request.

Emergency Hardware Swap: In the event of a TeleDefend hardware failure, Covad will replace the security hardware within two (2) business days of when the failure is reported to and confirmed by Covad Customer Care. If Covad does not replace the security hardware within the two (2) business days, Covad will credit Customer 10% of monthly TeleDefend Service charges at the affected site per incident, up to a maximum of 30% per month. The Customer must proactively report failure to meet this SLA to receive credit.

All credit requests must be made pursuant to Covad's credit procedures outlined in the Claims and Credit Availability section of this document. In addition, TeleDefend Claims and Credit Availability are subject to the following conditions:

- Customer must contact Covad Customer Care immediately upon TeleDefend Service failure to perform;
- Covad must be at fault for the failure to meet the SLA (as determined by Covad in its sole and reasonable commercial judgment); and
- Customer must provide Covad remote access to the security hardware and other Covad-provided CPE at all necessary times.

COVAD BILLING POLICIES

Billing for access initiates the day the Customer's order is closed (the "**Billing Start Date**"). A first invoice will be generated at such time. All subsequent invoices will be generated based on Customer's monthly anniversary date. Customer's monthly

anniversary date will be the date the Customer registered with Covad and created a Covad account. . For example, if Customer created an account on July 6 and the order closed on July 20, a first invoice will be generated July 20 covering the installation, CPE and other non-recurring fees as well as monthly recurring fees pro-rated from July 20 until August 6. On August 6, an invoice will be generated to cover monthly recurring fees for the period from August 6 through September 6. Subsequent invoices will be generated on the 6th of each month, covering monthly recurring fees, which are due in advance and any pro-rated fees or non-recurring fees from the previous month.

The Billing Start Date for hosting services is dependent on whether the Customer ordered a hosting plan at the time access was ordered, if a hosting plan was purchased separately from access or if Customer does not have Covad access services. Monthly service charges, upgrades/downgrades and move orders are pro-rated for access and hosting plans. The billing policy for these scenarios is described below:

1. Customer orders access and hosting plan at the same time:

In the event that a Customer orders a hosting plan at the same time a Covad broadband service is purchased, billing initiates the day that the Customer's access order closes. If, as described earlier, Covad is not able to provision the access plan originally requested, then Covad will notify the Customer and offer alternative access plans. The Billing Start Date for the hosting plan is dependent on the alternative access choice and is outlined in the following table:

Customer Access Choice	Billing Start Date
Customer selects alternative broadband service	Billing begins on the day the alternative order is closed
Customer selects Covad Dial-Up plan	Billing begins on the day the alternative order is closed
Customer cancels Covad access service	Hosted billing continues without change

2. Customer orders a Covad hosting plan at a different time than access or does not order Covad access:

If a Customer does not have Covad access services and does not order Covad access services, the Billing Start Date will be the date Customer registered with Covad and created an account and such date will be the monthly anniversary date. If a Customer purchases an access plan at a later date, fees for both access and hosting will be billed on the monthly anniversary date set when Customer created an account with Covad. If Customer has access and later adds a hosting plan, the anniversary date for access will match the anniversary date set when Customer created its account in connection with the access services. Fees for hosting are then pro-rated to match the billing anniversary date for access.

In both cases (1 & 2), Covad will send one integrated bill that reflects charges for all Covad services.

Customer may select one of three payment options: (1) check payment; (2) credit card payment or (3) automatic electronic funds transfer, when available to them. With the exception of government entities, all payment options may not be available for all billing (notify) methods. A Customer paying by check will receive paper invoices ("invoice billing"). A Customer paying by credit card or EFT will receive email statements. If Customer selects either credit card or electronic funds transfer, Covad will automatically debit such account each month. The Customer will receive an email of the monthly statement on their "invoice date", which is based on Customer's monthly anniversary date. If Customer selects invoice billing, Customer must remit payment to Covad each month. The Customer will receive a copy of the monthly invoice in the mail. As described above, a Customer is billed one month in advance for monthly recurring charges. For example, a customer billed on August 1st is charged from July 1st to July 31st for non-recurring charges as well as from August 1st to August 30th for monthly recurring charges. Customer shall be responsible for payment of any taxes or shipping charges. If Customer fails to pay any bill when due, Covad shall have the right to terminate the services and charge any disconnection and/or early termination fees that would apply if Customer had elected to terminate the Services. Payments are considered late if received after the due date.. For all late payments, Customer may be assessed interest at the lesser of (a) 1.5% per month on the outstanding balance due Covad or (b) the maximum interest charges permitted under applicable law. Covad may charge a processing fee of \$25.00 for returned checks.

An account with a multi-line end-user hierarchy ("**parent account**") may select consolidated billing (one invoice for all end-user accounts; sent to the consolidated parent) or individual billing (separate invoices for each end user account; sent to the separate end-user payers). For purposes of definition, a consolidated parent account or a sub-account within an individual parent account hierarchy are treated as a "Customer" under the above billing and payment terms and conditions.

SERVICE DISCONNECTION AND SATISFACTION GUARANTEE

For TeleSurfer, TeleSoho, TeleSpeed, TeleXtend Internet Services and TeleDefend Security Services, Customers have thirty (30) calendar days after the Billing Start Date to request a disconnection without an early termination fee. If the disconnection request is received in the first thirty (30) calendar days of service, Covad will provide a refund credit equal to all fees billed, with the exception of any fees associated with a Missed Appointment charge and/or the Self-Installation Kit or Equipment. If Customer disconnects the service within this thirty (30) calendar day 'grace period' following the Billing Start Date, Customer may return the TeleSurfer or TeleSoho Installation Kit for a full refund only if all equipment is included, if it is in its original working condition and original packaging and if it is received by Covad within thirty (30) days after Customer's disconnection request. Customer must call Covad Customer Care to disconnect the Customer Circuit. TeleSurfer and TeleSoho Customers will need to use the return label that was included in their installation kit. Customer should give the tracking number on the label to the Customer Care Agent so that Covad can track the status of the shipment. Upon verification that the shipment reached its destination intact, a credit will be issued to the Customer's account. TeleSpeed and TeleXtend customer will receive a shipping label in the mail from Customer Care upon notifying Covad that they will be taking advantage of the 30 Day Satisfaction Guarantee. Covad will track the status of the shipment and issue a credit to the Customer's account upon verification that the shipment arrived intact. Customer is responsible for any shipping charges for returned equipment.

Standard termination fees will apply after this thirty (30) calendar day period and Customers will no longer be able to return their Self Installation Kit or other Equipment for credit. Termination fees will apply for Customers that switch their service to another provider prior to fulfilling their term agreement.

For Email and Web Hosting Service, Customers who cancel within 30 days of ordering a plan will receive a full refund for the set-up fees and the monthly recurring cost, including additional features. However, if a Customer has registered a domain, this fee will not be refunded as the Customer now owns that domain and has the right to transfer it elsewhere.

Applicable termination fees shall be the lesser of (a) the fees for the remaining balance of the Customer Term or (b) the applicable Termination Fee set forth in the Other Fees for Covad Services section of this document.

To disconnect a service, the Customer can choose one of two methods: 1) Call Covad Customer Care at 888.64.COVAD or 2) Fax a notice of cancellation to Covad at 866.839.2887.

CUSTOMER INITIATED SERVICE CHANGE DUE TO CUSTOMER MOVE

All Covad Customers who are initiating a change in service due to a move require a Move Order. The process for a Move Order requires a physical move of the Customer Circuit from one location to another; therefore the existing line will need to be disconnected and a new order entered for the new location. Upon disconnecting the existing Customer Circuit, the Customer will be charged the standard Early Termination Fee (noted in the "Other Fees for Covad Internet Services" sections below). However, once the Customer establishes Covad Internet service at the new location and retains the Internet service for at least 30 days, Covad will apply a Retention Bonus equal to the Early Termination Fee plus fifty percent (50%) of the new Service's first month's monthly recurring fee in the form of a credit on the Customer's next invoice or credit card billing statement.

Move Orders can be initiated by calling Covad Customer Care at 1-888-64-COVAD, or by visiting SMART Account Manager at www.covad.net.

TeleSurfer and TeleSoho Customers may re-use their existing equipment at their new location provided that equipment is compatible with their new service. Customers need to inform the Covad Customer Care Representative that they are moving locations and are planning on reusing their existing equipment. If the Customer fails to inform the Covad Customer Care Representative of the Move Order, a new CPE will be shipped and Customer will be billed for a new CPE. If the Customer does not retain the new service for at least 30 days, the Retention Bonus will not be paid.

TeleSpeed and TeleXtend Move Orders will require Professional Installation services at the new location. Standard Professional Installation charges will apply. Customers are advised to allow 30 days for the service to be installed at the new locations. TeleSpeed and TeleXtend Customers may re-use their existing equipment at their new location. Customers need to inform the Covad Customer Care Representative that they are moving locations and are planning on reusing their existing equipment. If the Customer fails to inform the Covad Customer Care Representative of the Move Order, a new CPE will be installed by the Covad Field Service Technician and the Customer will be billed for a new CPE. Once the Customer establishes

TeleSpeed or TeleXtend Internet Service at the new location and retains the Internet service for at least 30 days, Covad will apply the aforementioned Retention Bonus in the form of a credit on the Customer's next invoice. If the Customer does not retain the new service for at least 30 days, the Retention Bonus and credit will not be paid.

In the event that Customer chooses to upgrade or downgrade to a different Internet Service requiring different CPE in connection with the move, Customer will need to order a new CPE and will be billed for the new CPE. Standard installation and equipment rebates available at the time of the move (if any) will apply. If Customer's requested Internet Service is not available at the new location or Covad does not provide any service to the Customer's new location, the disconnection will not be considered a move under this section. In such case, the standard Early Termination Fee will apply if applicable, and no Retention Bonus will be paid by Covad.

All Move Orders require the Customer to accept a new contract and new term agreement for the new service. Covad does not apply the Customer's previous contract or term agreement to the new service. Additionally, Customers will be subject to current Covad pricing for their new service. Covad does not guarantee that the Customer will be able to get the same pricing or service in their new location.

BILLING DISPUTES

If a Customer has a justified, good-faith dispute with any amounts on an invoice, Customer has (60) calendar days from the invoice date to claim a dispute by submitting in writing to support@covad.net or by calling Covad Customer Care at 1-888-64-COVAD. Customer must pay all amounts, whether or not in dispute, by the invoice due date. If Covad determines that Customer is entitled to a credit, Customer shall receive a credit on Customer's next invoice. If Customer fails to notify Covad of billing discrepancies within this (60) calendar day period, Customer will not be eligible for credit or invoice adjustments.

ACCEPTING NEW CONTRACTS

Covad may from time to time reduce pricing on existing services. Existing Customers have the opportunity to take advantage of the new pricing by accepting the terms of a new agreement. Unless otherwise stated, there will be an additional one or two year term requirements if the Customer accepts the new agreement. The Customer must visit SMART Account Manager (www.covad.net) to review any new pricing, and accept the terms of the new agreement.

OTHER FEES FOR COVAD INTERNET SERVICES

TELESURFER AND TELESOHO INTERNET SERVICES

INSTALLATION, REPAIR, AND TERMINATION FEES

Description of Service Provided	Price
TeleSurfer Internet Services Self Installation Kit	\$99.00
TeleSoho Internet Services Self Installation Kit	\$149.00
Professional Installation for TeleSurfer Internet Services	\$99.00
Professional Installation for TeleSoho Internet Services	\$175.00
Field Service Technician Dispatch Charge for TeleSurfer Internet Services	\$99.00
Field Service Technician Dispatch Charge for TeleSoho Internet Services	\$175.00
Missed Appointment Charge	\$99.00
Early Termination Fee for TeleSurfer and TeleSoho Internet Services – After completion of service installation option by Covad and prior to completion of Customer term.	Lesser of remaining contract value or \$250.00

TELESOHO IP ADDRESS FEES

IP Address Block	Usable	Set-Up Charge	Monthly Charge
256 with NAT	253 (NAT allows private IP address space behind the router)	Complimentary default	Complimentary default
8	5*	\$0	\$10

* For this configuration, Covad uses two (2) static IP addresses to provide the service and assigns one (1) static IP address to the router. A total of three (3) static IP addresses will be unavailable to the Customer.

TELESPEED AND TELEXEND INTERNET SERVICES

CUSTOMER PREMISES EQUIPMENT FEES

Customer Premise Equipment	Applicable Service(s)	Price
Netopia R4652-T IDSL/SDSL Router	TeleSpeed 144, 384, 768, 1.5	\$359.00
Efficient Networks Speedstream 5871 IDSL Router	TeleSpeed 144	\$359.00
Efficient Networks Speedstream 5851 SDSL Router	TeleSpeed 384, 768, 1.5	\$359.00
Netopia 4622 T1 Router	TeleXtend 384, 768, 1.5	\$599.00
Efficient Networks 5940 T1 Router	TeleXtend 384, 768, 1.5	\$599.00

IP ADDRESS FEES

IP Address Block	Usable	Set-Up Charge	Monthly Charge
256 with NAT	253 private IP Addresses behind the router	Complimentary default	Complimentary default
8	5*	No Charge (Requires IP Justification Form)	Complimentary (By request only)
16**	13*		\$10.00
32**	29*		\$15.00
64**	61*		\$20.00
128**	125*		\$25.00
256**	253*		\$50.00

* For these configurations, Covad uses two (2) static IP addresses to provide the service and assigns one (1) static IP address to the router. A total of three (3) static IP addresses will be unavailable to the Customer. NAT is not available for these configurations.

** For configurations with 16, 32, 64, 128, or 256 IP addresses, the Customer must complete ARIN information forms, to justify the need for the large blocks of IP addresses. Covad does not guarantee approval of all IP address requests.

INSTALLATION, REPAIR, CANCELLATION AND TERMINATION FEES

Description of Service Provided	Price
TeleSpeed Setup and Installation Charge	\$225.00
TeleXtend Setup and Installation Charge	\$450.00
Inside Wiring Charge - First Hour minimum	\$88.00
Additional 15 minute increments after initial hour	\$20.00
Field Technician Dispatch Charge - First hour minimum charge for dispatch during normal business hours	\$88.00
Additional 15 minute increments after initial hour	\$20.00
Early Termination Charge	Lesser of remaining contract value or \$500.00
Missed Appointment Charge	\$99.00
Special Construction Fees	See Below

SPECIAL CONSTRUCTION FEES

For TeleXtend Internet Services, Special Construction Fees may apply for any additional non-standard work at the Central Office facility or Customer's premises necessary to deliver the service. Details of the special construction work along with the associated fees will be communicated to the Customer via email prior to any work beginning. If the Customer does not respond to Covad within twenty (20) days of receiving the special construction notice, the Customer's order will be cancelled. All TeleXtend orders requiring Special Construction require Customer approval in writing (including email acceptance of the Special Construction Fees) prior to processing. Any Special Construction Fees incurred by Covad will be charged to the Customer along with any other applicable one-time installation or equipment fees. If the Customer cancels a TeleXtend order after approving Special Construction Fees, the Customer will be responsible for any charges incurred by Covad as a result of that Special Construction plus any additional cancellation fees.

ADDITIONAL SERVICES FEES

DIAL-UP INTERNET SERVICE FEES

Service	Usage per Billing Cycle	Charge
Overage Usage	More than 150 hours for stand-alone Dial service More than 10 hours for TeleSurfer, TeleSoho, TeleSpeed and TeleXtend Internet Services	\$1.50/hour or any portion thereof
800 Service	Any amount of time above zero minutes	\$4.50/hour or any portion thereof

TELEDEFEND SERVICE FEES

Description of Service Provided		Charge
NetScreen device		\$0.00
TeleDefend Self Installation Charge		\$0.00
Termination Charge per Site - Post Self Installation Kit has been shipped but prior to 12-month term.		\$500.00
Returned Security Hardware charge - Failure to return NetScreen device within thirty (30) days of Termination. Charge based on age of NetScreen device from service start date.	0-3 months	\$1,100
	4-6 months	\$950
	7-9 months	\$800
	10-12 months	\$650
	13-15 months	\$500
	16-18 months	\$350
	19-21 months	\$200
	22-24 months	\$50
	25+ months	\$0

If Customer chooses not to return Security Hardware the above charges will apply. All equipment should be returned in the original working condition and original packaging within thirty (30) days after Customer's disconnection request. Failure to return the equipment in the original packaging, in working condition within the thirty-day period will result in a charge for the equipment as set forth in the above table based on the age of the NetScreen device from service start date. Customer must call Covad Customer Care to receive a Return Materials Authorization ("RMA") number and include the RMA number with the package. Customer is responsible for any shipping charges for returned equipment. Covad will not accept equipment without RMA identification and will charge the Customer for the equipment based on the above table if the equipment is returned without RMA identification.

GLOSSARY

Backbone

- A major transmission path used for high volume network to network connections.
- In Covad's network, the backbone network consolidates data traffic from the individual DSL lines into a backbone network for delivery to the Internet and/or other regions.

Bandwidth

- The amount of data that can flow through a given communications channel in a specified period time, usually seconds.

Bridge

- A device that connects two networks as a seamless single network using the same networking protocol.
- Bridges operate at the hardware layer and do not include IP routing functionality. They simply forward packets without analyzing and re-routing messages.

CO or Central Office

- A telephone company facility within which all local telephone lines terminate and which contains equipment required to switch Customer telecommunications traffic.

Commercially Reasonable Effort

- A service that does not carry a QoS (Quality of Service) or a SLA (Service Level Agreement), often times with no minimum throughput guarantees.
- Covad's ADSL Internet Services (TeleSurfer and TeleSoho Internet Services) are considered "*commercially reasonable efforts*"

CPE or Customer Premises Equipment

- Any equipment located at a Customer's premises. Modems, bridges and routers are considered CPE.
- Covad provides Netopia CPE for TeleXtend Internet Service, Netopia and Efficient Networks CPE for TeleSpeed Internet Service, and ZyXel CPE for TeleSoho Internet Service. For TeleSurfer Internet Services, Covad provides an Ethernet modem in the Self Installation Kit (no brand specified).

CSU/DSU or Channel Service Unit/Digital Service Unit

- A common type of CPE for T1 services, the CSU/DSU terminates the physical connection and provides physical protection and diagnostic and monitoring features.

Demarc or Demarcation Point

- The point at the Customer premises where the line from the telephone company meets the premises wiring.

DHCP or Dynamic Host Configuration Protocol

- A protocol that allows end user workstation information including IP addresses to be dynamically assigned by a server on an as-needed basis.
- DHCP server functionality is built into most DSL routers.

DNS or Domain Name System

- The name resolution service for IP addresses that provides the friendlier text-based addresses for Internet resources.
Example: 192.168.1.1 = www.yourwebpage.com.

DSLAM or Digital Subscriber Line Access Multiplexer

- The device typically deployed at the CO that terminates all the DSL lines serviced by the CO.
- Covad places its own DSLAMs in leased space in a LEC's CO.

Dynamic IP

- An IP address is assigned to the client for the current session or some other specified amount of time.

Encryption

- Scrambles data in flight so the data is of no use if intercepted. It is the conversion of data into a form, called a ciphertext, which cannot be easily understood by unauthorized people. In order to recover the contents of an encrypted signal, the correct decryption key is required.
- Common forms of encryption include DES and 3DES. Covad's TeleDefend Service uses 3DES.

Ethernet

- A LAN technology that uses CSMA/CD delivery that can run over different media (cabling).
- Most of today's Ethernet LANs use twisted pair 10Base-T wiring that can support both standard Ethernet at 10Mbps and Fast Ethernet at 100Mbps

Firewall

- A device or software that filters the traffic exchanged between networks, enforcing each network's access control policy.

FOC or Firm Order Commitment

- A FOC is provided by the LEC and references the date that the LEC will perform the necessary work for Covad to establish a Customer's Internet service.

ILEC or Incumbent Local Exchange Carrier

- Also known as the telephone company, telco, LEC, RBOC, etc.

Inside Wiring

- Refers to wiring on the Customer side of the demarcation point.
- Customers are responsible for maintaining and extending inside wiring as needed to deliver Covad Internet Services.

IP Address or Internet Protocol Address

- A dotted decimal notation used to represent IP addresses. Example: 192.168.1.1

IPSec or Internet Protocol Security

- A developing standard for security at the network or packet processing layer. IPSec doesn't require changes to individual computers and is extensible, so new encryption standards can be swapped in as they become available.
- Provides 2 functions: authentication and encryption; and uses 3 components: AH, ESP and IKE. (AH -- Authentication Header, verifies authenticity of each packet. ESP -- Encapsulating Security Payload, encrypts the entire packet, and places it in a larger packet. IKE -- Internet Key Exchange, is the set of procedures that IPSec devices use to transfer security keys.)

Line sharing

- Line Sharing is a method of DSL line delivery that involves using an existing telephone line into the Customer's premises by electronically multiplexing the voice and data signals on the same physical wire.
- Line sharing separates the low voice frequencies and the higher data frequencies running across the same line

Local Loop

- A generic term for the connection between the Customer's premises and the telephone company's serving wire center.

NAT or Network Address Translation

- An Internet standard that allows a Customer's local network to use private IP addresses, which are not advertised to other users on the Internet. The IP address used for the router is the only IP address visible to the public Internet.
- Covad offers NAT with certain configurations of TeleSoho, TeleSpeed and TeleXtend Internet Services.

NIC or Network Interface Card

- The hardware that forms the interface between the computer (or other network device) and not only the data communications network for the LAN but also the IP connection through the DSL bridge or router.

NID or Network Interface Device

- A phone company installed device that connects a Customer's inside wiring to the telephone network. It is typically a small box installed on the exterior premises, basement or garage.

NID Splitter

- A device that a Covad technician installs at the Customers NID for line sharing orders. The splitter separates the voice traffic from the data traffic on the Customer's existing phone line.

PPPoE or Point-to-Point Protocol over Ethernet

- Covad uses PPPoE software to establish an Internet connection for certain Internet services.
- For TeleSurfer Link, TeleSurfer, and TeleSurfer Plus Internet Services, PPPoE software is required on the Customer's PC.

RJ-11

- A standard modular connector (jack or plug) that supports two pairs of wires (4 wires). Commonly used for most PSTN CPE such as a telephone, fax machine, modem

RJ-45

- A standard modular connector that can support up to four pairs of wires (eight wires).
- Commonly used with Category 5 ("Cat 5") cabling to create 10Base-T or 100Base-T networks.

Router

- A router is a device that connects two networks. Routers are similar to bridges, but provide additional functionality, such as the ability to filter messages and forward them to different places based on various criteria.
- The Internet uses routers extensively to forward packets from one host to another.

Static IP

- An assigned IP address used to connect to a TCP/IP network.
- The IP address stays assigned to the specific host or network device, so the same address can always be used to reach that device.

BEFORE THE ARIZONA CORPORATION COMMISSION

IN THE MATTER OF THE PETITION OF)
DIECA COMMUNICATIONS, INC. dba)
COVAD COMMUNICATIONS COMPANY)
FOR ARBITRATION OF AN)
INTERCONNECTION AGREEMENT WITH)
QWEST CORPORATION.)

DOCKET NO. T-03632A-04-0425
T-01051B-04-0425

STATE OF WASHINGTON
COUNTY OF KING

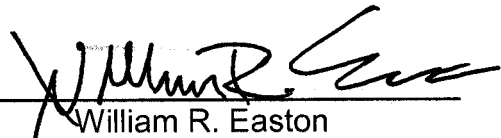
AFFIDAVIT OF
WILLIAM R. EASTON

SS

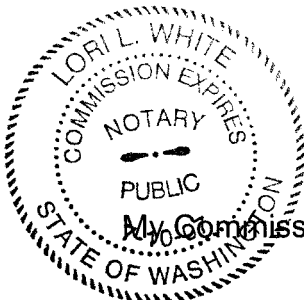
William R. Easton, of lawful age being first duly sworn, depose and states:

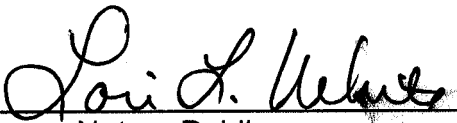
1. My name is William R. Easton. I am Director – Wholesale Advocacy for Qwest Corporation in Seattle, Washington. I have caused to be filed written direct testimony in Docket No. T-03632A-04-0425.
2. I hereby swear and affirm that my answers contained in the attached testimony to the questions therein propounded are true and correct to the best of my knowledge and belief.

Further affiant sayeth not.


William R. Easton

SUBSCRIBED AND SWORN to before me this 13th day of December, 2004.




Notary Public

My Commission Expires: 7/10/07

**KAREN A.
STEWART**

BEFORE THE ARIZONA CORPORATION COMMISSION

MARC SPITZER

Chairman

WILLIAM MUNDELL

Commissioner

JEFF HATCH-MILLER

Commissioner

MIKE GLEASON

Commissioner

KRISTIN MAYES

Commissioner

IN THE MATTER OF THE PETITION OF :
DIECA COMMUNICATIONS, INC., D/B/A :
COVAD COMMUNICATIONS COMPANY, :
FOR ARBITRATION OF AN :
INTERCONNECTION AGREEMENT WITH :
QWEST CORPORATION :

DOCKET NO. T-03632A-04-0425

DIRECT TESTIMONY OF KAREN A. STEWART

ON BEHALF OF

QWEST CORPORATION

(Issue 1: Retirement of Copper Facilities)

December 20, 2004

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I.	INTRODUCTION AND PURPOSE OF TESTIMONY	1
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I. INTRODUCTION AND PURPOSE OF TESTIMONY

Q. PLEASE STATE YOUR NAME, POSITION, EMPLOYER, AND BUSINESS ADDRESS.

A. My name is Karen A. Stewart. I am a Director in the Qwest Services Corporation Regulatory Compliance Organization. My office is located at 421 SW Oak Street, Portland, Oregon.

Q. PLEASE REVIEW YOUR EDUCATION, WORK EXPERIENCE AND PRESENT RESPONSIBILITIES.

A. I received a Bachelor of Science degree in Business Administration from Portland State University in 1980, and a Masters degree in Business Administration from the University of Oregon in July, 1994. I have been employed by Qwest and its predecessor companies since 1981. I have held a variety of positions in Qwest, including sales, product management, regulatory affairs, issues management, and E911 project management and technical design.

I am currently a member of the Qwest Regulatory Compliance organization and have represented Qwest in a number of workshops conducted under section 271 of the Telecommunications Act of 1996 ("the Act") related to Qwest's provisioning of unbundled network elements ("UNEs") in Arizona.

Q. HAVE YOU PREVIOUSLY TESTIFIED?

A. Yes. I have testified in the states of Arizona, Colorado, Idaho, Iowa, Minnesota, Montana, Nebraska, New Mexico, North Dakota, Oregon, South Dakota, Utah, Washington, and Wyoming.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

1 A. My testimony addresses Issue 1, as set forth in Covad's Petition for Arbitration. In
2 particular, I focus on Qwest's and Covad's competing interconnection agreement
3 ("ICA") language relating to the FCC's ruling in the *Triennial Review Order* ("TRO")¹
4 confirming the right of incumbent local exchange carriers ("ILECs") to retire the
5 copper loops that are currently used in their networks. Qwest and Covad have agreed
6 that they will address the other issues relating to the *TRO* (Issues 2 and 3) in their post-
7 hearing briefs, and I therefore do not address those issues in my testimony.

8 My testimony relating to copper retirement demonstrates that Covad is seeking to
9 impose obligations on Qwest that the FCC has rejected and that violate requirements of
10 the Act. I show that Qwest's proposed ICA language, by contrast, accurately
11 incorporates the rights and obligations established by FCC rules and should be adopted.

12 **II. ISSUE 1: RETIREMENT OF COPPER FACILITIES**
13 **(Sections 9.2.1.2.3, 9.2.1.2.3.1, and 9.2.1.2.3.2)**

14 **Q. PLEASE PROVIDE AN OVERVIEW OF THE DISPUTE RELATING TO THE**
15 **RETIREMENT OF COPPER FACILITIES.**

16 A. As Qwest and other carriers have increasingly moved from copper to fiber facilities, it
17 has become a common practice to retire copper facilities in many circumstances when
18 fiber facilities are deployed. The ability to retire copper facilities is important from a
19 cost perspective, since, without that ability, carriers would be required to incur the costs
20 of maintaining two networks. If carriers were faced with that duplicative cost, they
21 would have reduced financial ability to deploy facilities to replace copper and,

¹ *Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers*,
18 FCC Rcd. 16978 ¶ 195 (2003), *aff'd in part and rev'd and vacated in part*, *U.S. Telecom*
Association v. FCC, 359 F.3d 554 (D.C. Cir. 2004).

1 therefore, reduced ability to deploy facilities that can support advanced
2 telecommunications services. Accordingly, in the *TRO*, the FCC confirmed the right of
3 ILECs to retire copper loops and copper subloops that they are replacing with fiber
4 facilities without obtaining regulatory approval before doing so.² The only retirement
5 conditions that the FCC established are that an ILEC provide notice of its intent to
6 retire specific copper facilities so that, in some cases, CLECs can object to the FCC.

7 The dispute relating to this issue arises from Covad's attempt to condition Qwest's right
8 to retire copper facilities on onerous conditions that the FCC did not adopt and that, if
9 adopted, would reduce Qwest's ability to replace copper facilities with more advanced
10 network facilities. Specifically, in section 9.2.2.3.1 of its proposed ICA, Covad
11 attempts to prohibit Qwest from retiring copper facilities unless it provides Covad or
12 Covad's end-users an "alternative service" over a "compatible facility." Further, under
13 Covad's proposal, Qwest could not retire a copper facility unless the alternative service
14 it would be required to provide neither "increased the cost" nor degraded the quality of
15 service for Covad or its end-user. These burdensome conditions are nowhere to be
16 found in the *TRO* or in any other FCC order. They are entirely of Covad's own making,
17 unsupported by the Act or any rules implementing the Act. Adding to this absence of
18 legal support, Covad's proposal is so ambiguous that it is incapable of being
19 implemented in a reliable and predictable manner. For example, Covad's proposed ICA
20 language does not define the term "alternative service," does not explain what would
21 constitute an increase in cost, and does not provide a standard for determining whether
22 there is a "degradation" in quality. The three regulators that have ruled on Covad's
23 proposal thus far -- the Colorado Commission and ALJs with the Washington and

² *TRO* at ¶ 271.

1 Minnesota Commissions -- have accordingly rejected it and ruled that it is inconsistent
2 with the *TRO*.

3 Qwest's proposed language for sections 9.2.1.2.3.1 and 9.2.1.2.3.2, by contrast, is not
4 only consistent with the *TRO*, it also provides significant protections to Covad that are
5 not required by the *TRO*. Thus, in addition to including the retirement notice
6 requirements established by the *TRO*, Qwest's language establishes that Qwest (1) will
7 leave copper loops and subloops in service where it is technically feasible to do so and
8 (2) will coordinate with Covad the transition of new facilities "so that service
9 interruption is held to a minimum."

10 **Q. WHAT IS MEANT BY THE TERM "RETIRING" COPPER FACILITIES?**

11 A. As used in this context, "retiring" means to take facilities out of service. In some cases,
12 such as with aerial facilities, taking them out of service can mean actually removing
13 wire and cable from telephone poles. In other cases, facilities can be taken out of
14 service by being deactivated or deleted from network inventory systems but not
15 physically removed. In either case, the retirement of the facility eliminates the need to
16 maintain it.

17 **Q. UNDER THE FCC'S RULING CONFIRMING THE ILECS' RIGHT TO**
18 **RETIRE COPPER FACILITIES, IS IT NECESSARY FOR ILECS TO OBTAIN**
19 **REGULATORY APPROVAL BEFORE RETIRING COPPER LOOPS AND**
20 **SUBLOOPS?**

21 A. No. The *TRO* confirms the ILECs' right to retire copper loops and subloops that are
22 being replaced with fiber, which is a ruling that advances the FCC's objective of

1 increasing economic incentives for carriers to deploy fiber facilities.³ Specifically, in
2 paragraph 271 of the *TRO*, the FCC stated that it "decline[s] to prohibit incumbent
3 LECs from retiring copper loops or subloops that they have replaced with fiber." The
4 FCC explained that the retirement of copper loops being replaced with fiber is
5 permissible and that, in appropriate cases, ILECs must provide notice of such
6 retirements pursuant to the FCC's network modification disclosure requirements:
7 "[W]e reiterate that our section 251(c)(5) network modification disclosure requirements
8 . . . apply to the retirement of copper loops and copper subloops."⁴ In addition, in
9 granting ILECs the right to retire copper loops that are being replaced with fiber, the
10 FCC rejected CLEC proposals that would have required ILECs to obtain regulatory
11 approval before retiring copper facilities.⁵

12 **Q. HAS THE FCC ESTABLISHED COPPER RETIREMENT RULES THAT ARE**
13 **SPECIFIC TO SITUATIONS IN WHICH AN ILEC IS REPLACING COPPER**
14 **LOOPS WITH FIBER-TO-THE-HOME ("FTTH") LOOPS?**

15 A. Yes. As noted above, in paragraph 271 of the *TRO*, the FCC established the general
16 rule that ILECs have a right to "retir[e][] copper loops or copper subloops that they
17 have replaced with fiber." After confirming this general rule, the FCC then established
18 notice requirements that are specific to the situation where an ILEC is replacing a
19 copper loop or subloop with a FTTH loop. Specifically, ILECs must provide notice of
20 such planned retirements to the FCC and, after receiving notice from the FCC of an
21 ILEC's intent to retire a copper facility, a CLEC is permitted to object to the retirement

³ *TRO* at ¶ 281.

⁴ *TRO* at ¶ 271.

⁵ *TRO* at ¶ 281

1 in a filing with the FCC. Unless the FCC affirmatively allows the objection, it is
2 deemed denied 90 days after the FCC's issuance of the retirement notice.⁶
3 Significantly, the FCC made it clear that these unique notice requirements "apply only
4 to the retirement of copper loops and copper subloops, but not to the retirement of
5 copper feeder plant."⁷

6 **Q. DOES QWEST'S PROPOSED ICA LANGUAGE COMPLY WITH THESE FCC**
7 **RULINGS RELATING TO THE RETIREMENT OF COPPER FACILITIES?**

8 A. Yes. Qwest's language complies with and goes beyond the requirements in the *TRO*.
9 First, pursuant to section 9.1.15 of the ICA – a recently added section that the parties
10 have agreed upon – Qwest will provide notice of *all* planned copper retirements,
11 including notices relating to the retirement of copper feeder in addition to notices for
12 the retirement of copper loops and subloops. Second, under section 9.1.15, Qwest will
13 provide notice not just when it is replacing a copper facility with a FTTH loop, but
14 whenever a copper facility is being replaced with any fiber facility. Third, consistent
15 with the *TRO*, Qwest's proposed section 9.2.1.2.3 of the ICA establishes that in addition
16 to complying with the FCC's notice requirements, Qwest will comply with any
17 applicable state requirements. Fourth, while the FCC rule relating to notice of network
18 modifications permits an ILEC to provide notice by *either* filing a public notice with
19 the FCC *or* by providing notice through industry publications or an Internet site, Qwest
20 has committed in sections 9.1.15 and 9.2.1.2.3 to provide three different types of
21 notice: (1) through postings on its website; (2) by a public filings with the FCC; and (3)

⁶ *TRO* at ¶ 282. The *TRO* does not preempt evaluations by state commissions of whether loop retirements comply with state law. *Id.* at ¶ 284.

⁷ *TRO* at ¶ 281 & n.829.

1 through e-mail notices that Qwest will send to CLECs. Qwest provides the website
2 notice on its "disclosure website" at <http://www.qwest.com/disclosures>. This
3 disclosure website has been used for other disclosures in recent years, and CLECS are
4 familiar with its location and use.

5 The information Qwest provides in its notices includes the state and wire center where
6 the facility is located, the specific location of the facility within the wire center, the
7 anticipated date that the facility will be retired, and a description of the immediate
8 effect of the retirement.

9 **Q. ALTHOUGH IT IS NOT NECESSARY FOR QWEST TO OBTAIN**
10 **REGULATORY APPROVAL BEFORE RETIRING COPPER FACILITIES,**
11 **DOES QWEST NEVERTHELESS TAKE INTO CONSIDERATION THE**
12 **NEEDS OF CLECS BEFORE RETIRING THESE FACILITIES?**

13 A. Yes. First, before deciding to retire copper loops that are serving Qwest and/or CLEC
14 end-users customers, Qwest routinely evaluates whether it is technically feasible to
15 leave the copper loops in place. In many instances, Qwest decides not to retire copper
16 loops when it deploys fiber facilities. Second, when it does retire a copper loop that a
17 CLEC is using to provide DSL service, Qwest gives the CLEC the option of continuing
18 to provide DSL service to the end-user customer through the use of CLEC-owned
19 remote digital subscriber loop access multiplexers ("DSLAMs"). The CLEC can use
20 Qwest remote collocation space to collocate a DSLAM and to continue providing DSL
21 service to its end-user customers. Third, Qwest coordinates circuit changes with
22 CLECs to ensure that transitions from copper facilities to new fiber facilities are
23 orderly and involve minimal disruptions of local exchange service. Fourth, when
24 Qwest replaces copper facilities with new copper facilities, it jointly coordinates the

1 transition to the new facilities with CLECs to minimize service disruptions.

2 **Q. DOES THE *TRO* PROVIDE SUPPORT FOR THE CONDITIONS COVAD**
3 **SEEKS TO IMPOSE ON QWEST?**

4 A. No. In fact, the FCC considered and rejected conditions proposed by other CLECs that
5 would have similarly compromised the right of ILECs to retire copper facilities.
6 Several CLECs proposed that ILECs should not be permitted to retire any copper
7 facilities without taking affirmative steps to avoid effects on CLEC service.⁸ For
8 example, one party to the FCC's *TRO* proceeding proposed that ILECs should not be
9 permitted to retire copper loops unless they permitted CLECs access to their broadband
10 facilities. The FCC rejected this and other proposals, concluding that its notice rules
11 "serve as adequate safeguards."⁹ There is no suggestion – and certainly no requirement
12 – anywhere in the *TRO* or in any other FCC order that an ILEC is permitted to retire a
13 copper facility only if, as Covad proposes, it provides an "alternative service" that
14 neither "degrades service" nor "increases the cost" to Covad or its end-user customers.

15 **Q. HAVE OTHER STATE COMMISSIONS EVALUATED WHETHER**
16 **COVAD'S "ALTERNATIVE SERVICE" PROPOSAL IS CONSISTENT**
17 **WITH THE *TRO*?**

18 A. Yes. In an order issued just last week, on December 15, 2004, a Minnesota
19 administrative law judge rejected Covad's copper retirement proposal in its entirety.

⁸ *TRO* at ¶ 281 & n.822.

⁹ *TRO* at ¶ 281.

1 In doing so, she explained that "[t]here is no legal support in the TRO for Covad's
2 position concerning 'alternative' services."¹⁰

3 In addition, a decision issued last month in the Qwest/Covad arbitration in
4 Washington, an administrative law judge rejected Covad's proposal on the ground
5 that it is inconsistent with the FCC's rulings in the TRO: "Covad's proposal requiring
6 Qwest to provide an alternative arrangement at no additional cost to Covad is not
7 consistent with the requirements of the Triennial Review Order."¹¹ In so ruling, the
8 ALJ observed that the FCC has "rejected proposals to place specific conditions on an
9 ILEC's right to retire copper facilities" and has only required that ILECs provide
10 notice of planned retirements."¹²

11 Similarly, the Colorado Commission has rejected Covad's proposal, finding that it is
12 without legal support.¹³ In addition, the Colorado Commission recently rejected
13 Covad's new position that Qwest's right to retire copper facilities should be limited to
14 situations in which Qwest is replacing copper loops with FTTH loops, ruling that

¹⁰ *In Matter of the Petition of Covad Communications Co. for Arbitration to Resolve Issues Relating to an Interconnection Agreement with Qwest Corporation*, MPUC Docket No. P-5692, 421/IC-04-549, OAH Docket No. 3-2500-15908-4, Arbitrator's Report at ¶ 23 (Dec. 15, 2004) ("Minnesota Arbitration Order").

¹¹ *In the Matter of the Petition for Arbitration of Covad Communications Company with Qwest Corporation Pursuant to 47 U.S.C. Section 252(b) and the Triennial Review Order*, Washington Commission Docket No. UT-043045, Order No. 04, Arbitrator's Report and Decision at ¶ 38 (Nov. 2, 2004).

¹² *Id.* at 13.

¹³ *Petition of Qwest Corporation for Arbitration of an Interconnection Agreement*, Docket No. 04B-160T, Initial Commission Decision, Decision No. C04-1037 at 54 (rel. Aug. 27, 2004).

1 Qwest is therefore permitted to retire copper loops that it replaces with hybrid copper-
2 fiber loops.¹⁴

3 Thus, in the three arbitrations in which this issue has been reviewed, Covad's proposal
4 has been rejected and found not to comply with governing law.

5 **Q. IF QWEST WERE REQUIRED TO PROVIDE AN ALTERNATIVE SERVICE**
6 **OVER COMPATIBLE FACILITIES, AS COVAD PROPOSES, WHAT EFFECT**
7 **COULD THAT HAVE ON QWEST'S DECISIONS WHETHER TO DEPLOY**
8 **THE FIBER FACILITIES THAT SUPPORT ADVANCED**
9 **TELECOMMUNICATION SERVICES?**

10 A. Imposing Covad's requirements would reduce Qwest's economic incentive and ability
11 to deploy fiber facilities, since compliance with those requirements would force Qwest
12 to consider all such costs in any investment decision concerning whether to deploy
13 fiber. If Qwest is faced with costs of providing an "alternative service" over
14 "compatible facilities" (as defined by Covad) each time it considers whether to replace
15 copper facilities with fiber, the economics of that decision will be changed in a way that
16 will make the deployment of fiber less likely. In addition, Covad's proposal would
17 prohibit Qwest from recovering the costs of this undefined "alternative service" if the
18 costs exceed the amount Covad is currently paying Qwest for access to copper loops.
19 A requirement to provide an alternative service for which Qwest may not recover its
20 costs would create an economic disincentive for deploying fiber that is clearly

¹⁴ *Petition of Qwest Corporation for Arbitration of an Interconnection Agreement*, Docket No. 04B-160T, Decision No. C04-1348, Order Granting in Part and Denying in Part Application for Rehearing, Reargument, or Reconsideration at 10 (rel. Nov. 16, 2004).

1 inconsistent with the Act's objective, as set forth in section 706, of increasing the
2 deployment of advanced telecommunications facilities.

3 While the FCC stated in the *TRO* that it was not preempting state commissions from
4 evaluating whether an ILEC's policies relating to loop retirements comply with state
5 law, any state law requirements relating to this issue must be consistent with the Act's
6 objective of encouraging the deployment of advanced telecommunications facilities and
7 its requirement that ILECs are permitted to recover the costs they incur to provide
8 interconnection and access to unbundled network elements.

9 **Q. PLEASE EXPLAIN FURTHER HOW QWEST'S ABILITY TO RETIRE**
10 **COPPER FACILITIES RELATES TO THE GOAL OF ENCOURAGING THE**
11 **DEPLOYMENT OF FACILITIES THAT SUPPORT BROADBAND SERVICES.**

12 A. In the *TRO*, the FCC identified the deployment of broadband services as one of its
13 paramount objectives, emphasizing that "[b]roadband deployment is a critical domestic
14 policy objective that transcends the realm of communications."¹⁵ Accordingly, the
15 FCC sought to formulate rules that would "help drive the enormous infrastructure
16 investment required to turn the broadband promise into a reality."¹⁶

17 An important component of the FCC's regulatory regime for promoting investment in
18 broadband is its ruling confirming the right of ILECs to retire copper loops. The
19 economic incentive of a carrier to deploy fiber loops increases if the carrier is permitted
20 to retire copper loops when it deploys fiber. Without a right to retire copper, a carrier
21 evaluating whether to deploy fiber would be faced with the duplicative costs of

¹⁵ *TRO* at ¶ 212.

¹⁶ *Id.*

1 maintaining *both* the copper and the fiber facilities. A critical shortcoming of Covad's
2 proposal is that it would require Qwest to either (1) not retire copper loops and incur
3 the resulting duplicative maintenance costs or (2) retire copper loops but only after
4 providing an "alternative service" for which full cost recovery would not be allowed.
5 Both of these options reduce Qwest's ability to deploy fiber facilities and are
6 inconsistent with the right of Qwest to recover its costs for providing access to network
7 elements to CLECs.

8 **Q. DO YOU HAVE ADDITIONAL CONCERNS RELATING TO COVAD'S**
9 **PROPOSAL FOR COPPER RETIREMENTS?**

10 A. Yes. Covad's proposal also is improper because, as discussed above, it would prevent
11 Qwest from recovering its costs and also is so ambiguous as to be incapable of clear
12 implementation. Covad's proposal would require Qwest to provide an "alternative
13 service" at no increase in the cost that Covad is currently incurring in Arizona to
14 provide DSL service to its end-user customers. This artificial cap on what Covad
15 would be required to pay for an alternative service violates Qwest's right under the Act
16 to recover the costs it incurs to provide unbundled network elements and
17 interconnection services. Specifically, section 252(d)(1) of the Act requires that rates
18 for interconnection and network element charges be "just and reasonable" and based on
19 "the cost (determined without reference to a rate-of-return or other rate-based
20 proceeding) of providing the interconnection or network element."

21 Under Covad's proposal, Qwest would only be permitted to charge a maximum
22 monthly recurring rate of \$2.42 for the alternative service, since Covad is currently
23 paying the Commission-prescribed monthly rate of \$2.42 for access to the high
24 frequency portion of the unbundled loop. This rate would serve as a cap on Qwest's

1 cost recovery under Covad's proposal, regardless of the amount of the costs Qwest
2 would incur to provide an alternative service. This artificial cap could prevent Qwest
3 from recovering its costs in violation of the Act's cost recovery requirement. Moreover,
4 this rate was established by this Commission after specifically reviewing the recurring
5 costs of line sharing, not some undefined "alternative" service. It is simply
6 inappropriate to use the cost for one product, to establish a rate for a different
7 "alternative" service.

8 **Q. WHAT CONCERNS DO YOU HAVE RELATING TO THE AMBIGUITY OF**
9 **COVAD'S PROPOSAL?**

10 A. It is fundamental that ICA terms and conditions, as with any contract, should be clearly
11 defined to apprise parties of their rights and obligations and to thereby avoid or
12 minimize disputes. Covad's "alternative service" proposal falls far short of this basic
13 requirement.

14 The most glaring contractual shortcoming of Covad's proposal is the absence of any
15 definition of the "alternative service" that Qwest would have to provide upon retiring a
16 copper loop. Nowhere in its proposal does Covad define this term, which is central to
17 its proposal. Under the plain language of the ICA, therefore, Qwest would have no way
18 of knowing what alternative service to provide or whether such a service would meet
19 the requirements of the ICA. Covad likewise fails to define the requirement that the
20 alternative service "not degradate the service or increase the costs to CLEC or End-
21 User Customers of CLEC." It does not propose, for example, any metrics to determine
22 whether the service has degraded. Nor does it offer any ICA language for measuring
23 whether the costs of service have increased.

24 In short, Covad's language fails to define with any clarity the parties' rights and

1 obligations and would inevitably lead to costly and time-consuming disputes in the
2 implementation and administration of the ICA.

3 **Q. PLEASE EXPLAIN HOW COVAD HAS RECENTLY REVISED ITS**
4 **PROPOSAL RELATING TO COPPER RETIREMENT.**

5 A. Covad initially proposed ICA language that had its "alternative service" requirement
6 only applying when Qwest replaces a copper loop with a FTTH loop. In recent filings
7 in other states, however, Covad has changed its position by eliminating application of
8 the requirement to FTTH loops and, instead, proposing it for situations where Qwest
9 replaces a copper loop with a hybrid copper-fiber loop. In view of Covad's continuing
10 refusal to be clear about the type of "alternative service" it is seeking, Qwest is
11 concerned that Covad ultimately may be seeking access to the broadband capabilities of
12 hybrid loops.

13 **Q. IN THE *TRO*, DID THE FCC ISSUE A RULING CONCERNING WHETHER**
14 **ILECS ARE REQUIRED TO PROVIDE UNBUNDLED ACCESS TO HYBRID**
15 **LOOPS?**

16 A. Yes. In paragraphs 288 and 290 of the *TRO*, the FCC ruled that ILECs are not required
17 to unbundle the broadband capabilities of hybrid loops. In reaching that result, the FCC
18 specifically considered and rejected arguments that Covad presented in that proceeding
19 in an attempt to obtain unbundled access to the broadband capabilities of these loops:

20 We decline to require incumbent LECs to unbundle the next-
21 generation network, packetized capabilities of their hybrid loops to
22 enable requesting carriers to provide broadband services to the mass
23 market. AT&T, WorldCom, Covad, and others urge the Commission
24 to extend our unbundling requirements to the packet-based and fiber
25 optic portions of incumbent LEC hybrid loops. We conclude,
26 however, that applying section 251(c) unbundling obligations to these
27 next-generation network elements would blunt the deployment of

1 advanced telecommunications infrastructure by incumbent LECs and
2 the incentive for competitive LECs to invest in their own facilities, in
3 direct opposition to the express statutory goals authorized in section
4 706. The rules we adopt herein do not require incumbent LECs to
5 unbundle any transmission path over a fiber transmission facility
6 between the central office and the customer's premises (including fiber
7 feeder plant) that is used to transmit packetized information.
8 Moreover, *the rules we adopt herein do not require incumbent LECs to*
9 *provide unbundled access to any electronics or other equipment used*
10 *to transmit packetized information over hybrid loops, such as the*
11 *xDSL-capable line cards installed in DLC systems* or equipment used
12 to provide passive optical networking (PON) capabilities to the mass
13 market.¹⁷

14 As this ruling shows, the FCC has made it clear that ILECs are not required to
15 unbundle the broadband capabilities of their hybrid loops. To the extent that Covad is
16 seeking access to those capabilities, its request violates the *TRO*.

17 **Q. IS THIS FCC RULING RELATING TO HYBRID LOOPS RELEVANT TO**
18 **COVAD'S REVISED PROPOSAL FOR COPPER RETIREMENT?**

19 A. Yes. As I discussed above, Qwest is concerned that the underlying intent of Covad's
20 new proposal may be to gain unbundled access to the broadband capabilities of
21 hybrid loops -- precisely what the FCC rejected in the *TRO*. In this regard, it is
22 significant that Covad has not offered a definition of the "alternative service" that
23 Qwest would have to provide before retiring a copper facility. Given the complete
24 vagueness of that term, if Covad's proposal were adopted, it is quite possible Covad
25 would claim that access to the broadband capabilities of hybrid loops is the
26 "alternative service" to which it would be entitled. That outcome would directly
27 violate the FCC's ruling.

¹⁷ *TRO* at ¶ 288. (Footnotes omitted and emphasis added).

1 **Q. DID THE COLORADO COMMISSION RECENTLY ADDRESS COVAD'S**
2 **REVISED PROPOSAL?**

3 A. Yes. The Colorado Commission ruled very clearly that Covad's new focus on hybrid
4 loops and its application of its "alternative service" proposal to those loops does not
5 make the proposal lawful. The Commission explained:

6 In our reading of the TRO, ¶¶ 277-94, the FCC does not differentiate
7 between requirements when "home run" copper is replaced with
8 copper-fiber hybrid loops. Covad cites ¶¶ 277-279 of the TRO,
9 stating that the copper retirement rules only apply to the extent that
10 hybrid loops are an interim step to establishing all fiber FTTH loops.
11 Nowhere in these paragraphs do we find this statement. In fact, the
12 FCC indicates at footnote 847 that an ILEC can remove copper loops
13 from plant so long as they comply with the FCC's Part 51 notice
14 requirements, without any exclusion given to hybrid loops.

15 As this ruling shows, Covad's newly revised language does not cure the flawed
16 nature of its proposal.

17 **Q. PLEASE SUMMARIZE YOUR POSITION RELATING TO THIS ISSUE?**

18 A. Qwest has proposed language that complies fully with the FCC's requirements relating
19 to the retirement of copper facilities and also goes beyond those requirements to
20 minimize the possibility of service disruptions for Covad's end-user customers. By
21 contrast, Covad has proposed unlawful conditions that would decrease Qwest's
22 incentive to deploy fiber facilities, could prevent Qwest from recovering its costs, and,
23 because of their ambiguity, would lead to inevitable disagreements and disputes in the
24 parties' implementation of the ICA. Accordingly, the Commission should adopt
25 Qwest's proposed ICA language relating to this issue.

1

III. CONCLUSION

2 **Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

3 **A. Yes.**

BEFORE THE ARIZONA CORPORATION COMMISSION

IN THE MATTER OF THE PETITION OF)
DIECA COMMUNICATIONS, INC. dba)
COVAD COMMUNICATIONS COMPANY)
FOR ARBITRATION OF AN)
INTERCONNECTION AGREEMENT WITH)
QWEST CORPORATION.)

DOCKET NO. T-03632A-04-0425
T-01051B-04-0425

STATE OF Oregon
COUNTY OF Multnomah

AFFIDAVIT OF
KAREN A. STEWART

: SS

Karen A. Stewart, of lawful age being first duly sworn, depose and states:

1. My name is Karen A Stewart. I am Director for Qwest Services Corporation in Portland, OR. I have caused to be filed written direct testimony in Docket No. T-03632A-04-0425/ T-01051B-04-0425.
2. I hereby swear and affirm that my answers contained in the attached testimony to the questions therein propounded are true and correct to the best of my knowledge and belief.

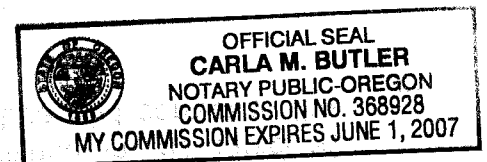
Further affiant sayeth not.

Karen A. Stewart
Karen A. Stewart

SUBSCRIBED AND SWORN to before me this ninth day of December, 2004.

Carla M. Butler
Notary Public

My Commission Expires: 6/1/07



**MICHAEL
NORMAN**

BEFORE THE ARIZONA CORPORATION COMMISSION

MARC SPITZER

Chairman

WILLIAM A. MUNDELL

Commissioner

JEFF HATCH-MILLER

Commissioner

MIKE GLEASON

Commissioner

KRISTIN K. MAYES

Commissioner

**IN THE MATTER OF THE PETITION)
OF DIECA COMMUNICATIONS, INC.)
dba COVAD COMMUNICATIONS)
COMPANY FOR ARBITRATION OF)
AN INTERCONNECTION)
AGREEMENT WITH QWEST)
CORPORATION)**

Docket No. T-03632A-04-0425

T-01051B-04-0152

DIRECT TESTIMONY OF MICHAEL NORMAN

ON BEHALF OF

QWEST CORPORATION

DECEMBER 20, 2004

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IDENTIFICATION OF WITNESS

Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS AND POSITION WITH QWEST CORPORATION.

A. My name is Michael Norman. My business address is 700 W. Mineral Ave., Littleton Colorado. I am employed as a Director within the Technical and Regulatory Group of the Local Networks Organization of Qwest Corporation (Qwest).

Q. PLEASE DESCRIBE YOUR WORK EXPERIENCE, AND PRESENT RESPONSIBILITIES.

A. I have been employed in the telecommunications industry for over 25 years. I began my career in 1978 as a contractor for AT&T in Washington State surveying routes to place cable in rural areas. In 1980, I was hired by Qwest (formerly Mountain Bell and then U S WEST) into the Local Network Organization. During my 14 years in the Local Network Organization I have held several different engineering positions including Outside Plant Engineering, Tactical Planning, Central Office Engineering, and Network Planning. In 1999, I was hired by Qwest Wireless as a Lead Network Engineer where I participated in building and planning a new state of the art Code Division Multiple Access ("CDMA") network.

In 2003, I began my current job as a Director in the Technical & Regulatory Group to represent Qwest in regulatory proceedings and to ensure compliance with regulatory requirements.

PURPOSE OF TESTIMONY

Q. WHAT IS THE PURPOSE OF YOUR DIRECT TESTIMONY?

A. The purpose of my testimony is to provide technical expertise on Disputed Issue No. 5 (Regeneration Requirements (Sections 8.2.1.23.1.4, 8.3.1.9, 9.1.10)). I will demonstrate that Qwest's language for the parties' Interconnection Agreement ("ICA") is operationally and technically reasonable and consistent with the FCC's rules and regulations.

ISSUE 5: CLEC TO CLEC REGENERATION REQUIREMENTS

(SECTIONS 8.2.1.23.1.4, 8.3.1.9, 9.1.10)

Q. PLEASE EXPLAIN ISSUE NO. 5.

A. Covad's proposal requires Qwest to provide channel regeneration for CLEC-to-CLEC connections as a wholesale interconnection product. Covad would have Qwest provide such service at no charge to Covad.¹

Q. TO PUT THIS DISPUTE INTO CONTEXT, PLEASE GENERALLY DESCRIBE THE PARTIES' FUNDAMENTAL DISAGREEMENT.

A. Based upon the Parties' interpretation of the FCC's rules and regulations, the Parties disagree upon whether Qwest is required to provide a wholesale channel regeneration product on a CLEC-to-CLEC connection.

¹ In its proposed language for sections 8.2.1.23.1.4 and 8.3.1.9, Covad appears to carve out an exception to its general request that Qwest provide regeneration on CLEC-to-CLEC connections for free, although the language is confusing.

1 **Q. WHAT IS CHANNEL REGENERATION AND WHY IS IT NECESSARY?**

2 A. Channel regeneration is required when the length of a circuit prevents the transmission of
3 the proper signal strength to the point such that there is degradation in signal quality.
4 There are industry standards, based on signal quality, that limit the length of the cables that
5 join pieces of equipment. If the length of the cable exceeds the requirements as provided
6 by the American National Standard Institute ("ANSI") Standard T1.102-2003 "Digital
7 Hierarchy-Electrical Interface; Annex B" then, regeneration of the signal is required to
8 satisfy acceptable circuit performance.

9 **Q. WHAT IS QWEST'S POSITION REGARDING CHANNEL REGENERATION ON**
10 **A CLEC-TO-QWEST CONNECTION?**

11 A. Qwest delivers all CLEC-ordered circuits between the CLEC's collocation space and
12 Qwest's network with the proper signal quality by first designing the circuit and then, as
13 part of provisioning, Qwest tests the circuit to ensure the service quality is met. Qwest
14 designs circuits to ensure that the cable between the Qwest-provided active elements and
15 the Qwest Central Office cross-connects will meet proper signal level before delivering the
16 circuit to the CLEC. In addition, Qwest partners with the CLEC to test both ends to
17 maintain circuit integrity. During the 271 proceedings, charges for CLEC-to-Qwest
18 channel regeneration were thoroughly debated and, despite being permitted by the FCC and
19 state commissions to charge for channel regeneration on such a connection, Qwest agreed
20 that it would not charge for providing this regeneration unless regeneration was not
21 required by ANSI standards but was specifically requested by a CLEC.

1 **Q. DOES THIS ARBITRATION PROCEEDING INVOLVE CLEC-TO-QWEST**
2 **CHANNEL REGENERATION?**

3 A. No. The issue in this proceeding is whether Qwest must provide channel regeneration on a
4 CLEC-to-*CLEC* connection free of charge, not whether Qwest must provide channel
5 regeneration on a CLEC-to-*Qwest* connection. As mentioned above, where channel
6 regeneration is required under the ANSI standard, Qwest has agreed to provide channel
7 regeneration at no charge to CLECs when they interconnect with *Qwest's* facilities.

8 **Q. WHY SHOULD CLEC-TO-QWEST CONNECTIONS, AND ANY RESULTING**
9 **REGENERATION REQUIREMENT, BE TREATED DIFFERENTLY THAN**
10 **CLEC-TO-CLEC CONNECTIONS?**

11 A. For connections between a CLEC and Qwest in a Qwest central office, Qwest is a party to
12 the connection and as stated above, has agreed not to charge to regenerate a signal between
13 it and a CLEC. The rationale behind this is that in a Qwest to CLEC scenario, Qwest is
14 providing the CLEC with services from its network (e.g. unbundled loops) and which are
15 purchased through the ICA. In this situation, Qwest designs the circuit and maintains the
16 ability to test and maintain the connection because it is a party to the connection. When a
17 CLEC, such as Covad, wants to connect with another CLEC in the central office it is
18 pursuing a business relationship that does not include Qwest. For example, CLEC A may
19 want to use CLEC B's fiber ring rather than Qwest's network for transport. Qwest is not
20 involved in the design of the circuit or the choice of transmission facilities between the
21 CLECs. Qwest's involvement is limited to either providing cable routing when the CLECs

1 connect directly from one collocation space to another or by providing jumper wire
2 connections between the CLEC cables that are brought to the common Interconnection
3 Distribution Frame ("ICDF"). In each instance, the CLEC is actually self-provisioning the
4 connection and is responsible for the circuit. If a CLEC, who is interconnecting with
5 another CLEC or with its own non-adjacent collocation space, asks Qwest to assume
6 responsibility for the connection from one CLEC to another, rather than doing it itself,
7 Qwest will provide the connection with regeneration, if necessary, but will charge a market
8 rate for the service. Qwest's ability to charge a market rate encourages the CLEC to invest
9 in its own facilities, thereby furthering the goals of the Telecommunications Act.

10 **Q. IS QWEST OBLIGATED BY THE FCC TO PROVIDE A CLEC-TO-CLEC**
11 **CONNECTION OR REGENERATION?**

12 A. No. In its *Fourth Advanced Services Order*, the FCC discussed CLEC-to-CLEC
13 connections and amended 47 C.F.R. 51.323(h) to list specifically the only situations in
14 which an ILEC has an obligation to provide a connection between the collocated
15 equipment of two CLECs.² Specifically, ILECs must provide a connection between two
16 CLEC collocation spaces: 1) if the ILEC does not permit the CLECs to provide the
17 connection for themselves³; or 2) under Section 201 when the requesting carrier submits

² *In the Matter of Deployment of Wireline Services Offering Advanced Telecommunications Capability, Fourth Report and Order (Fourth Advanced Services Order)*, CC Docket No. 98-147, (FCC 01-204) Rel. August 8, 2001.

³ Pursuant to 47 C.F.R. § 51.323(h)(1) an ILEC is not required to provide a connection if "... the incumbent LEC permits the collocating parties to provide the requested connection for themselves"

1 certification that more than 10 percent of the amount of traffic will be interstate.⁴ Qwest
2 permits CLECs to connect to each other outside of their collocation space; therefore it has
3 removed itself from the CLEC-to-CLEC relationship and has no FCC-imposed obligation
4 to provide a CLEC-to-CLEC connection, much less regeneration for a CLEC-to-CLEC
5 connection.

6 **Q. PLEASE EXPLAIN WHAT YOU MEAN WHEN YOU SAY THAT QWEST**
7 **PERMITS CLECS TO CONNECT WITH EACH OTHER?**

8 A. Certainly. As I have explained earlier, CLECs can connect with each other in two different
9 ways. First they can perform a direct connect where CLEC A or CLEC B provides the
10 cabling between the two collocation spaces. In the second method of connection, CLEC A
11 takes its cable from its collocation to a Qwest ICDF. Likewise, CLEC B takes its cable to
12 the same ICDF and a jumper wire is run connecting the two CLECs. Through these two
13 scenarios, Qwest permits CLECs to perform either a direct connection or a cross
14 connection outside of their collocation space.⁵

⁴ Pursuant to 47 C.F.R. § 51.323(h)(2) “[a]n incumbent LEC is not required to provide a connection between the equipment in the collocated space of two or more telecommunications carriers if the connection is requested pursuant to section 201 of the Act”

⁵ See ICA Sections 8.2.1.23 and 8.2.1.23.1.

1 **Q. WHAT OPTIONS, OTHER THAN PURCHASING A FINISHED SERVICE, ARE**
2 **AVAILABLE WHEN REGENERATION IS NECESSARY TO MEET THE ANSI**
3 **STANDARD ON A CLEC-TO-CLEC CONNECTION?**

4 A. When a CLEC chooses to connect directly to another CLEC, and if regeneration is
5 required, either CLEC may regenerate the signal from its collocation space or regenerate
6 the signal from a mid span point between collocations, thereby boosting the signal to meet
7 the requirements of the ANSI standard. In both situations, Qwest is not involved in
8 provisioning the connection or resulting regeneration. Since the CLEC's facilities must
9 traverse Qwest's route, however, pursuant to Section 8.2.1.23 of the Parties' ICA, Qwest
10 will identify the route and provide the CLEC with information regarding the footage
11 between it and its CLEC partner, so that the CLECs may properly design and provision the
12 connection. CLECs connecting through ICDF have the same opportunity to boost the
13 signal from their collocations space or at a mid-span point.

14 **Q. ALTHOUGH QWEST IS NOT OBLIGATED TO PROVIDE CLEC-TO-CLEC**
15 **CHANNEL REGENERATION, DOES QWEST OFFER CLEC-TO-CLEC**
16 **CHANNEL REGENERATION?**

17 A. Yes. In cases where regeneration is required on circuits between two CLECs, Qwest offers
18 the connection and channel regeneration as a "finished service" to CLECs under its FCC 1
19 Access Tariff. Where a CLEC chooses not to provision its own circuit or hire its own
20 contractor to provision the circuit and instead requests that Qwest provide the CLEC-to-
21 CLEC connection requiring channel regeneration, the CLEC may purchase a private line or

1 access service from Qwest and Qwest will design the end-to-end service which will include
2 any necessary channel regeneration.

3 **Q. WHAT IS A FINISHED SERVICE?**

4 A. A finished service is a complete end-to-end service, such as a private line or access service,
5 offered by Qwest to wholesale or retail customers at the tariffed rate. The definition of
6 'finished services' was agreed to through the 271 workshops.⁶

7 **Q. WHAT IS THE BASIS FOR COVAD'S POSITION AND IS IT LEGALLY**
8 **SUSTAINABLE?**

9 A. Covad cites to the FCC's *Second Report and Order* for the proposition that Qwest should
10 provide CLEC-to-CLEC regeneration "on the same terms Qwest provides regeneration for
11 other cabling arrangements in its central offices."⁷ There is nothing in the *Second Report*
12 *and Order*, however, which supports Covad's position most notably because the *Second*
13 *Report and Order* involves a discussion of ILEC to CLEC connections and not CLEC-to-
14 CLEC connections. Furthermore, Covad's implicit argument that Qwest determines
15 whether a CLEC-to-CLEC connection will require regeneration because it controls the
16 assignment of collocation space, and therefore, Qwest should be responsible for any
17 regeneration charge fails, not only because Qwest's processes for assigning collocation

⁶ See ICA and 14th Revised SGAT at Section 4, Definition of Finished Service.

⁷ See Issue 5 of Covad's Petition (no page numbers are provided) *citing* In the Matter of Local Exchange Carrier's Rates, Terms and Conditions for Expanded Interconnection Through Physical Collocation for Special Access and Switched Transport, Second Report and Order, CC Docket No. 93-162, FCC 97-208 (Rel. June 13, 1997), ¶¶ 117-118 (the "*Second Report and Order*").

1 space are not at issue here, but also because Qwest does not make a unilateral
2 determination of where a CLEC's collocation space will be placed. The FCC's rules
3 require an ILEC to provide a report to a requesting carrier that details the space available in
4 a particular central office such that the CLEC can indicate its collocation location
5 preferences prior to the assignment of collocation space. Covad can, therefore, acquire
6 information about space that is available in a central office and request that it be placed in a
7 particular location in that office. In addition, Qwest offers CLECs the option of requesting
8 a tour of its central offices to view the available space after which the CLEC may request,
9 and Qwest will assign to CLEC any space that is available. Thus, collocation assignment is
10 not a unilateral decision made by Qwest, and Covad's position is not sustainable under the
11 FCC's rules and regulations, whereas, Qwest's reliance on the *Fourth Advanced Services*
12 *Order* and resulting rule modifications is sound.

13 **Q. IS COVAD'S PROPOSAL FOR QWEST TO PROVIDE REGENERATION FOR**
14 **CLEC-TO-CLEC CONNECTIONS AT NO CHARGE TO COVAD REASONABLE?**

15 A. No. Covad's requested language would require Qwest to provide regeneration free of
16 charge for any and all hypothetical future joint ventures and circuit arrangements at no
17 charge to CLECs. Covad makes such a request under the unfounded assumption that
18 Qwest purposely provisions collocation space for CLECs on different floors or at opposite
19 corners of the central office, thereby making regeneration necessary, and thereby increasing
20 the cost of CLEC cross-connections. On the other hand, in his direct testimony filed in
21 Phase II of the wholesale cost docket CLEC representative Rex Knowles states: "Often,

1 such equipment is located only a short distance away because Qwest generally groups
2 collocating CLECs together within the wire center.”⁸

3 Qwest provides collocation space on a first come first served basis, and therefore does not
4 control the timing of individual CLEC collocation requests, the amount of space requested,
5 or the evolution of CLEC relationships. It is predictable that CLEC business decisions over
6 time may require circuit connections that need regeneration. It is unreasonable to expect
7 Qwest to absorb the cost of regeneration when Qwest is not involved in the exchange of
8 traffic or the provision of any service related to the interconnection between third parties.

9 **SUMMARY AND CONCLUSION**

10 **Q. PLEASE SUMMARIZE YOUR TESTIMONY?**

11 A. As set forth above, Qwest’s language on this disputed issue is consistent with Qwest’s
12 obligations under the FCC’s rules and regulations, while Covad’s proposed language has
13 no sustainable basis in law. Accordingly, the Commission should adopt Qwest’s language
14 on this disputed issue.

15 **Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

16 A. Yes, it does.

⁸ Phase II Wholesale Cost Docket proceeding CLEC witness Rex Knowles, XO Regulatory V.P. filed May 16, 2001 on Page 15, lines 10 and 11.

BEFORE THE ARIZONA CORPORATION COMMISSION

IN THE MATTER OF THE PETITION OF
DIECA COMMUNICATIONS, INC. dba
COVAD COMMUNICATIONS COMPANY
FOR ARBITRATION OF AN
INTERCONNECTION AGREEMENT WITH
QWEST CORPORATION.

)
)
) DOCKET NO. T-03632A-04-0425
) T-01051B-04-0425
)
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STATE OF COLORADO
COUNTY OF ARAPAHOE

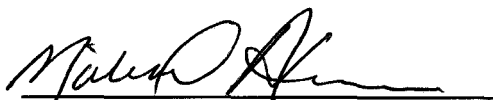
AFFIDAVIT OF
MICHAEL NORMAN

: SS


Michael Norman, of lawful age being first duly sworn, depose and states:

1. My name is Michael Norman . I am a Director for Qwest Corporation in Littleton, Co. I have caused to be filed written Direct and Response testimony in Docket No. T-03632A-04-0425, T-01051B-04-0425.
2. I hereby swear and affirm that my answers contained in the attached testimony to the questions therein propounded are true and correct to the best of my knowledge and belief.

Further affiant sayeth not.



SUBSCRIBED AND SWORN to before me this 13th day of December, 2004.


Notary Public

My Commission Expires: 4/5/2008

